(DRAFT VERSION 2) WEBMIP FUNCTIONAL SPECIFICATION

Draft   *Restricted to, National Grid Metering & Advantica*

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Executive Summary

National Grid Metering produces meter related works and services quotations for their customers: Gas Suppliers and their Agents. The quotations are produced manually by the Industrial and Commercial (I&C) department in response to enquiries raised by customers. An estimated 8,000 quote enquiries are handled this way each year. The proposed webMIP on-line quotation system will enable I&C to provide automatic quotations for the majority of their customers enquiries without the need for manual intervention. The new system is expected to reduce the number of enquiries handled by the I&C team by 90%, leaving the I&C staff to deal with the more complex bespoke or unusual quotation requests.

WebMIP is a tactical solution, with an expected lifespan of around 18 months. The system will initially operate without reference to any other system. It will then run in conjunction with the back-end functions of 'SAP Blueprint'. The system will eventually be replaced by SAP Blueprint and its web portal interface.

This document details the functional requirements of the webMIP system. It describes the operations and processes required to complete the system and fulfil I&C's business requirements for handling quotes via an on-line internet based solution. It also describes the administration and scope aspects of the webMIP system.

1 System Scope

The primary objective of the system is to allow Agents to submit enquiries for meter related works and services without the involvement of I&C staff. The secondary objective is to produce one or more meter work quotations to satisfy each submitted enquiry, again without the involvement of I&C staff, and make these quotations available to the Agents for acceptance.

The scope boundary for the system can be defined via the work flow required. The scope starts once an enquiry is initiated and ends once the provided quote has been accepted, rejected or lapsed (after 90 days).

1.1 Within Scope

The following stated requirements are listed as in scope and will facilitate the functions and operation of the webMIP system.

- Collect job requirements for meter related works in the form of a questionnaire completed by a registered webMIP user (see Appendix A). The requirements will be collected for the following job types:

    o Install, Exchange, Removal, Alteration, OFMAT, EMS, AMR, Relocate, Pressure Change, Capacity Change, Adversarial, Standard Install, Standard Exchange, Standard Removal.

    o An additional job type of 'Other' is also permitted.

- Facility to upload documents, relating to an enquiry. Maximum size of file 3 megabytes, maximum size of files relating to an enquiry 10 megabytes.

- The facility to download files stored within the system.

- The ability to classify a quote as Standard (automatic) or bespoke.

- A bulk upload process with simple validation that will allow users to upload system data items into webMIP.

- The ability to provide an automatic quotation for enquiries that meet the correct requirements (see Automatic quotation scope below).

- Provide the facility for specific I&C users to upload a manual quotation for enquiries that webMIP determines as 'out of scope'.

- To provide the facility for users to accept/reject manually uploaded and automatically created quotations via a web browser.

- To scan uploaded files for viruses and malicious content and remove offending files

1.1.1 Automatic Quotation Scope

The rules in Illustration 5: Automatic or Manual Quotation Flow Chart (page 16) show

whether an enquiry will result in an automatic or manual quotation.

The scope for the system automatically producing quotations specifically excludes:

- Where an MPRN number is not provided (except new install); 55

- Exchange Job where the Existing meter is not a diaphragm (type D, L or S) or within one U size categorization of the proposed meter e.g. Moving from a U16 to U40 would be more than one U size and the selected existing meter size is not 'Other';

- Annual Quantity is greater than 732 MWh;

- Where Booster or Compressor is required; 60

- Where Job description details are provided;

- Service pressure is one of MP35, MP65, MP105, MP180, IP or HP;

- Metering pressure is greater than 21;

- Qmax is greater than 11464KWh;

- Twin stream is required; 65

- Bypass is required;

- Works that require a site survey to be performed prior to quotation;

- Works where there are no meter modules, housings, etc. known to the system that meet the requirements of the submitted enquiry.

Manual Quotation Scope 70

Where the system is unable to produce a quotation, the system provides automatic emails to I&C and appropriate agent users, informing them that this is the case. The system supports a manual process of uploading a quotation document generated off-line and making it available to the third-party. The system has no knowledge of the contents of the manual quotation. 75

1.1.2 Communication Scope

The system will provide communication in the form of email and web page requests. The system will send email to users of the system, these emails may where appropriate include system generated attachments. The system will be capable of emailing quotes to users where appropriate. 80

1.2 Out of Scope

The system will not provide the following functions or requirements that are deemed to be beyond the scope of the system at this point in time.

- Where the third-party requires communications to be via telephone, fax or the post this is performed manually by I&C staff and not by the webMIP system; 85

- Managing Procurement, Planning Scheduling and Despatch activities for the I&C value chain;

- Any changes to off-line systems required to accommodate on-line quotations;

- Any changes required to SAP in order to accommodate on-line quotations solution;

- Automated interface to any of the existing systems/off-line databases;   90

- Tracking of the processes used to generate manual quotations;

- Production of 'ad-hoc' management information reports;

- Management of customer queries and complaints;

- Automatic quotation for non-standard jobs, only Standard Install, Standard Exchange and Standard Removal job types will be automatically quoted;   95

- Management of any variations that occur on accepted quotations;

- Supplier specific end customer uplifts for quotation pricing;

- Supplier specific, end customer customised quotations with letter heads;

- Manage acknowledgements for supplier accepted quotations;

- Manage quotation preparation for jobs handled manually;   100

- Quotation generation for jobs received via supplier sent bulk .CSV files;

- Automatic generation of quotations deemed as bespoke or non-standard;

- Facility to validate quotation details and pricing provided by SAP Blueprint.

2 Users, Roles And Security

Several different groups of users will interact with the webMIP system. The users are required to manage the system and also provide the data input to build the quotes. The different users of the system can be defined within five separate roles:

- webMIP Administrator;
- I&C User;
- I&C Customer Services;
- Supplier Administrator;
- Supplier Agent.

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These different roles fall into the hierarchy described in the diagram below:
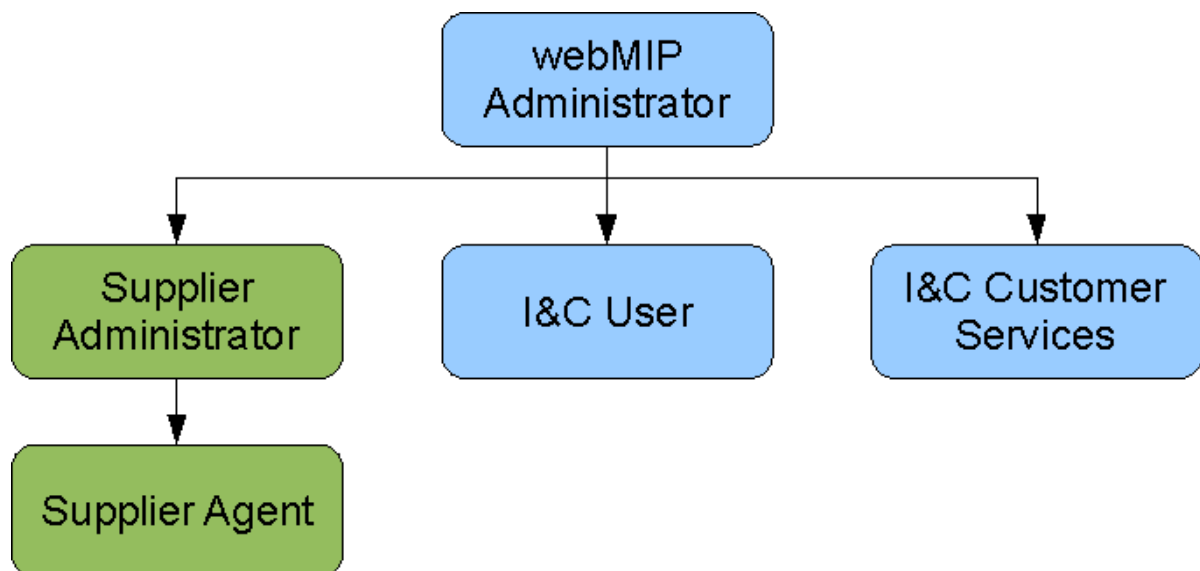
Illustration 1: User Role Hierarchy

2.1 webMIP Administrator

The webMIP Administrator role is able to control the overall system e.g. editing module and add-on data, running system reports, etc. The Administration section of this document has further information on the administrative functions that can be performed by the webMIP Administrator role.

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The role is able to create, view, update and delete users with the roles of Supplier Administrator, Supplier Agent, I&C User and I&C Customer Services. The webMIP Administrator can also perform all of the functions available to the I&C User and the I&C Customer Services roles. When creating or editing the Supplier Agent, the webMIP Administrator, will be forced to associate the Supplier Agent with an Existing Supplier

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Administrator.

2.2 I&C User

The I&C User role is able to complete all of the main day-to-day tasks required within the webMIP system. The I&C User role is able to:

- Create and enter enquiries on behalf of any valid Supplier Agent/User listed in the webMIP system;

- Accept and reject quotes on behalf of a Supplier Agent/User associated with the quote, provided a notification/evidence has been provided by the supplier;

- Upload a manual bespoke quote to the webMIP system;

- View all enquiries and quotes within the system enabling I&C users to assist customers in populating enquiry details & resolving customer queries simultaneously.

2.3 I&C Customer Services

The I&C Customer Services role is able to view all enquiries and quotes within the webMIP system, but is unable to edit or update any data. The role allows the customer services team within I&C to provide support for the Supplier Agents.

2.4 Supplier Administrator

The role of Supplier Administrator is able to maintain data relating to the supplier to which the user is associated.

The Supplier Administrator role is also able to create, view, edit and delete users with the role of Supplier Agent. Each user created in this way is associated with the supplier represented by the Supplier Administrator.

2.5 Supplier Agent

The Supplier Agent role is able to create enquiries and view or edit enquiries that have been created by other agents associated with the same supplier. An agent working for multiple suppliers will have corresponding multiple login id's Specific/Dedicated to each supplier.

The Supplier Agent role can also submit enquiries for quotation and accept or reject quotes for their associated supplier.

When a Supplier Agent creates a new enquiry the system will automatically associate their related Supplier details to the enquiry.

2.6 Action Matrix

The action matrix listed below outlines some key functions of the webMIP system and the roles that can perform them.

Role Action	WebMIP Admin	I&C User	I&C Cust Services	Supplier Admin	Supplier Agent
Create enquiry	X	X			X
Read enquiry	X	X	X		X*
Submit enquiry	X	X			X*
Delete enquiry	X	X			
Store enquiry	X	X			X*
Upload files to enquiry	X	X			X*
Accept quote	X	X			X*
Reject quote	X	X			X*
Delete quote	X				
Upload files to quote	X	X			
Run system reports	X				
Delete files from enquiry/quote	X	X			
Create I&C users	X				
Delete I&C users	X				
Create Supplier Admin users	X				
Create Supplier Agents	X			X**	
Delete Supplier Agents	X			X**	
View Supplier Agents	X	X	X	X**	X*
Reset User Password	X			X**	
Edit/Read/Delete/Create system data	X				

> *Only those related to the Supplier that the Agent is associated with.
>
> **Only those created by the same Supplier Administrator

Table 1: Action Matrix

2.7 Advantica administration

In addition to the purpose built user roles an additional support role will be available to Advantica. This role is considered outside the scope of the webMIP system functions. Advantica will use the built-in management tools provided by the chosen software solution to manage, maintain and investigate issues relating to the webMIP system. For the purposes of support Advantica may request that the aforementioned roles can be applied to an Advantica support user.

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2.8 System Security

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Each user provides a user name and password to access the system. Each user within webMIP will have a unique user name. The system only allows access to users that have been defined within webMIP. The system prevents unauthorised users access to the system and its data. Advantica retains access to the system for support purposes.

2.8.1 Password Complexity

Passwords held within the webMIP system will conform to the following rules:

- Minimum length of 8 characters
- Contain a non-alphanumeric character e.g. %
- Contain upper case and lower case characters
- Contain alpha and numeric characters

2.8.2 Password Expiry

Passwords held within webMIP will expire after 30 days. If a user logs in after 30 days have passed the user will still be able to log in to the system but will have to enter a new password before they can gain access to the webMIP system. Following 60 days of inactivity a user will be unable to access the system and their account will be locked. The account can be unlocked by either the webMIP administrator. For Supplier Agents the associated Supplier Administrator may also unlock the agents account.

2.8.3 Forgotten Passwords

For users that forget their passwords it is expected that the webMIP Administrator and the Supplier Administrator will reset the users password. The Supplier Administrator will only be able to reset the passwords of agents they have created. The webMIP Administrator will have the ability to reset all users passwords.

2.8.4 File Uploads

Files that are uploaded to the webMIP system will be scanned for viruses or malicious content: it is the responsibility of National Grid and the Supplier agents to ensure that any files uploaded to or downloaded from webMIP are free from viruses or other malicious content. Any files deemed to contain a virus or malicious content via the Advantica selected anti virus solution will be removed from the system. The webMIP system will ensure that enquiry with the missing file will contain warning text stating that the file has been removed for security reasons.

Further security details will be defined in the design phase of the project.

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3 System Process

This section of the document describes the processes and tasks performed by the webMIP system. It details the processes from the initiation of an enquiry to the final quotation and briefly describes some of the processes required to administer the system. The limitations and constraints placed upon these tasks and processes are described previously in the System Scope section of this document.

The quotation process is driven by the supplier agents. There are three main stages to the quote process:

- Enquiry. The user fills in a questionnaire, providing data relating to the meter, the meter site, and environment;

- Quote generation. If the enquiry is submitted then a quote is generated detailing the costs of the specified meter and any add-ons;

- Quote acceptance. If a quote is accepted by the user then the quote turns into a Job, (at this point the job is outside the scope of webMIP functionality). At this point the webMIP system will email an I&C mailbox irrespective of the quote being automated or manual, to enable National Grid Metering to progress the tasks relating to completing the job. The email will contain a PDF file attachment that will contain the following information:

  o Cost reconciliation for SAP Blueprint (phase 2)

  o Details which can be used for planning/scheduling and procurement

  o Quotation acceptance Timestamp

  o Possibly some internal cost details that National Grid Metering have to pay the networks for enquiries.

The webMIP system provides a quick and easy interface for agents to request a quotation on-line. Agents may also phone, fax, email or post a request for a quote; in these cases the enquiry is entered into webMIP by an I&C User on behalf of the agent. The webMIP system will record the I&C User and the supplier information on such enquiries.

The user logs into the system using a user name and password. Each user is associated with a single supplier on whose behalf they perform work. If the user is a member of the I&C team then the user selects the user name of the Supplier Agent on whose behalf they are entering the enquiry information.

3.1 Enquiry

The system allows the user to perform the following primary functions:

- Create a new enquiry;

- Save an enquiry;

- Amend an existing enquiry;

- Copy an existing enquiry to create a new enquiry;
- Submit an enquiry for quotation.

Each enquiry held within the webMIP system will have one of the following status categorisations:

- In progress
- Submitted for quotation
- Quoted for
- Lapsed

The complete list of enquiry data items are described in Appendix A.

3.1.1 Create A New Enquiry

The system generates and records a unique enquiry reference for the new enquiry. The system records supplier-related information against the new enquiry by referring to the user agent details to find the supplier on whose behalf the user performs work. The system records the user details against the enquiry.

The user enters site location information and then fills in the questionnaire.

The questionnaire is presented as a series of questions (either grouped or singular) on a succession of screens. The system saves the answers to questions when the user completes a screen. The system alters the 'flow' of questions depending on the answers given to previous questions. Each question will have 'help' associated with it that is presented to the user on request. The user is able to exit from the questionnaire before all the questions have been answered: the user may choose to amend or complete the enquiry at a later date.

When the questionnaire is completed, the user is able to request a quote.

3.1.2 Amend An Existing Enquiry

The user searches for existing enquiries using the unique enquiry reference, transaction reference, post code or MPRN of an enquiry. The system limits the enquiries that can be queried to those associated with the supplier on whose behalf the user performs work: the queried enquiries may have been created by other users. If the enquiry has not been marked as 'quoted for', the user is able to amend the enquiry.

The user may amend the site location information, completed questions from the questionnaire or complete unanswered questions.

When the questionnaire is completed, the user is able to request a quote.

3.1.3 Copy An Existing Enquiry To Create A New Enquiry

The user searches for existing enquiries using the unique enquiry reference, transaction reference, post code or MPRN of an enquiry. The system limits the enquiries that can be queried to those associated with the supplier on whose behalf the user performs work: the

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queried enquiries may have been created by other users.

The system allows Agents and I&C users to create a new enquiry by selecting an existing enquiry and copying the details of that enquiry. The system generates and records a unique enquiry reference for the new enquiry. The system amends the new enquiry by applying the current Agents details and removing any files associated with the original enquiry.

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The user is able to amend the new enquiry.

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A user can create a new enquiry by copying:

- An enquiry that has not been submitted for quotation

- An enquiry that has been submitted for quotation

- A rejected quotation

- An accepted quotation

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3.2 Questionnaire Flow Chart

In order for the user to receive a quote, a short questionnaire needs to be completed. The webMIP system prompts the user to answer the questions. Some questions within the questionnaire are dependent on answers from other questions. The following three illustrations describe the overall flow of the enquiry questions.

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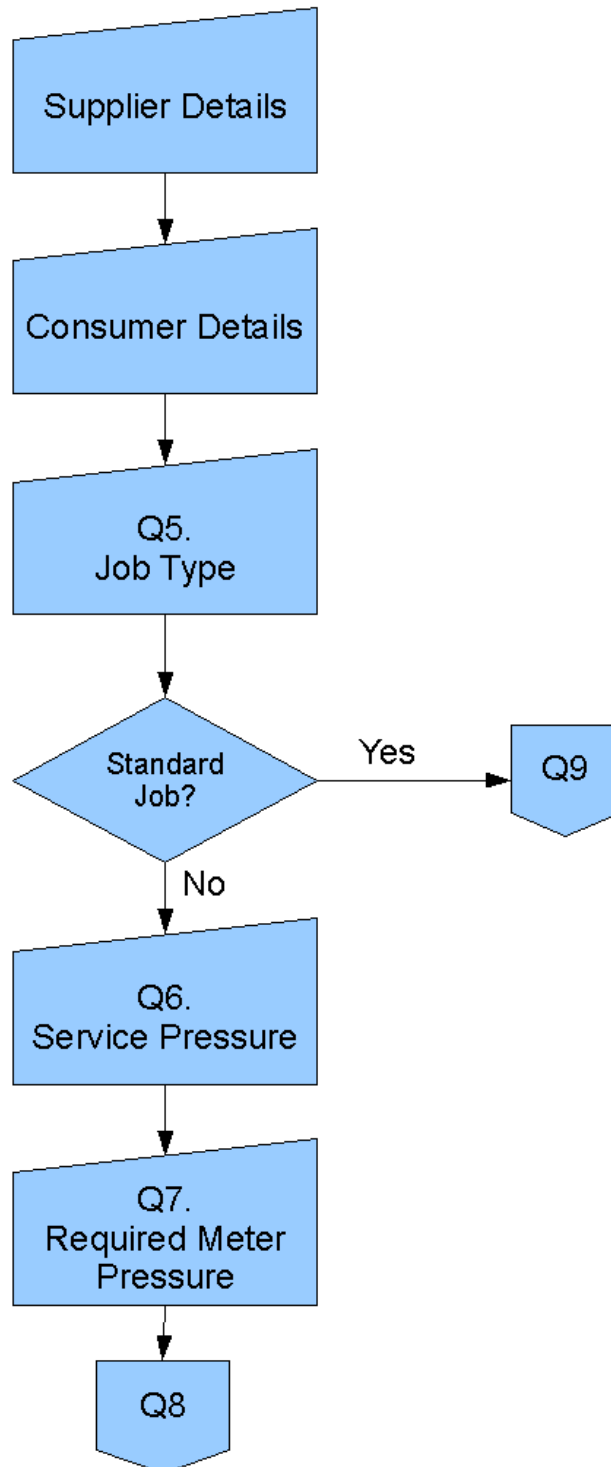
Illustration 2: Questionnaire Flow Chart - Slide 1
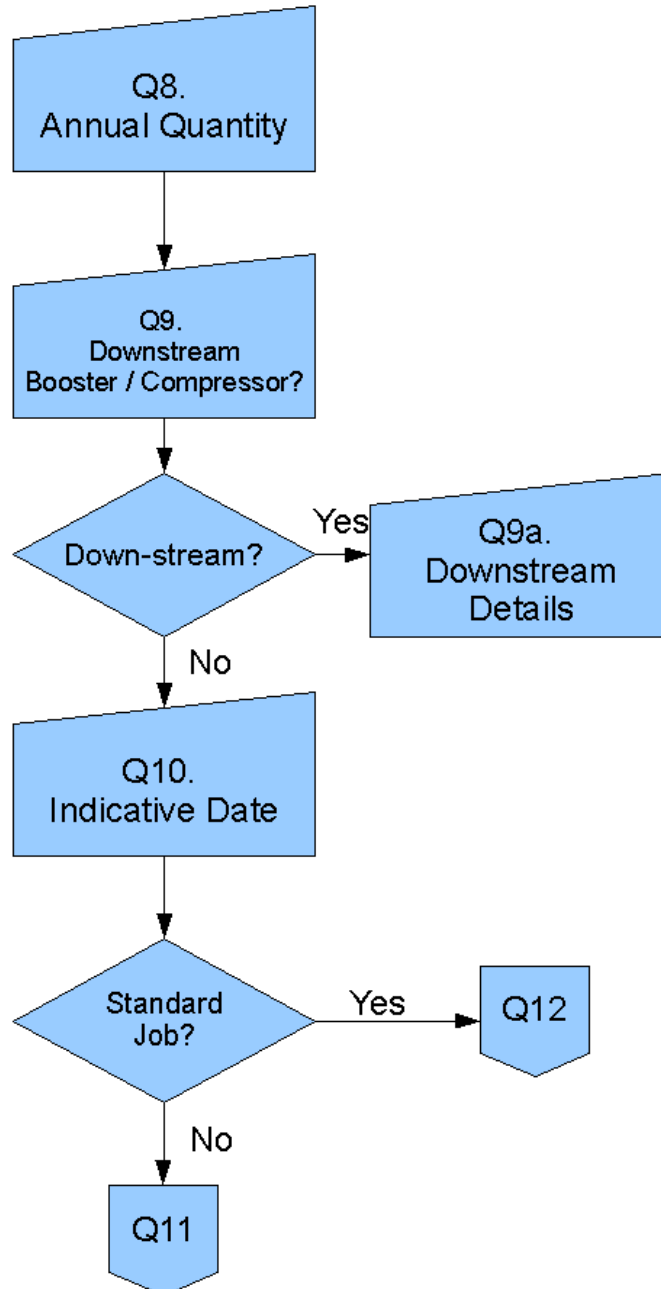
Illustration 3: Questionnaire Flow Chart - Slide 2
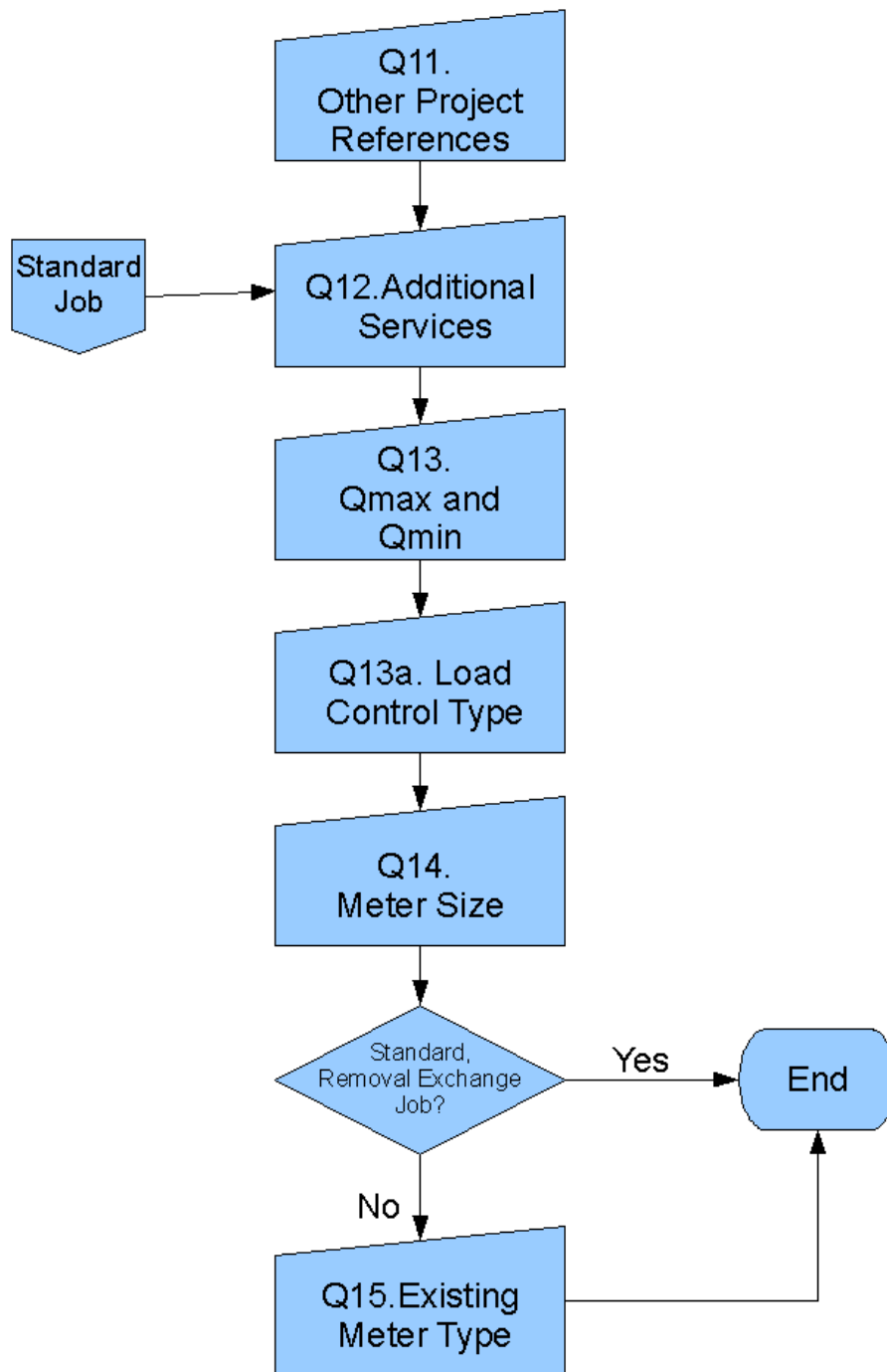
Illustration 4: Questionnaire Flow Chart - Slide 3

3.3 Quote generation

The system generates quote(s) on request against enquiries that have not already been marked as 'quoted for'. There are two methods of quote generation:

- Automatic quotation. The system produces a quote without manual intervention;

- Manual quotation. The system is unable to automatically produce a quote and relies on a manual process to produce the quotation off line and then upload the quotation into webMIP. 290

The rules in Illustration 5 show whether an enquiry results in an automatic or manual quotation. Standard Exchange jobs will only promote an automatic quotation if the existing meter meets the requirements described in Illustration 5. If the meter size is not provided by the user, then webMIP will convert the Qmax value into the appropriate U category e.g. U16, this conversion will be used in place of the meter size. 295

For adversarial jobs, automatic quotation is possible, however an additional caveat is placed on the automatic quote stating that any purging requirements will be addressed as a variation on the job at a later date. 300

In addition to the inability of the system to produce an automatic quotation, the requirement for a site survey causes the need for a manual quotation.

The following LP jobs require a site survey:

- Relocation;

- Exchange where an upgrade is greater than one size e.g. U16 up to U40. 305

3.3.1 Quotation Status Categorisations

For each quotation in the webMIP system one of the following status categorisations will apply:

- In progress (typically used for manual quotations)

- Waiting approval 310

- Accepted

- Rejected

- Lapsed

3.3.2 Additional Classification Of Automatic And Bespoke/Manual Jobs

The automatic generation of quotes will apply to Bluebook type jobs and classic jobs that don not require a site survey. The webMIP system will always treat Classic job that requires a site survey as a bespoke or manual job, similarly jobs that require manufacturer design will always be treated as a bespoke/manual job. 315
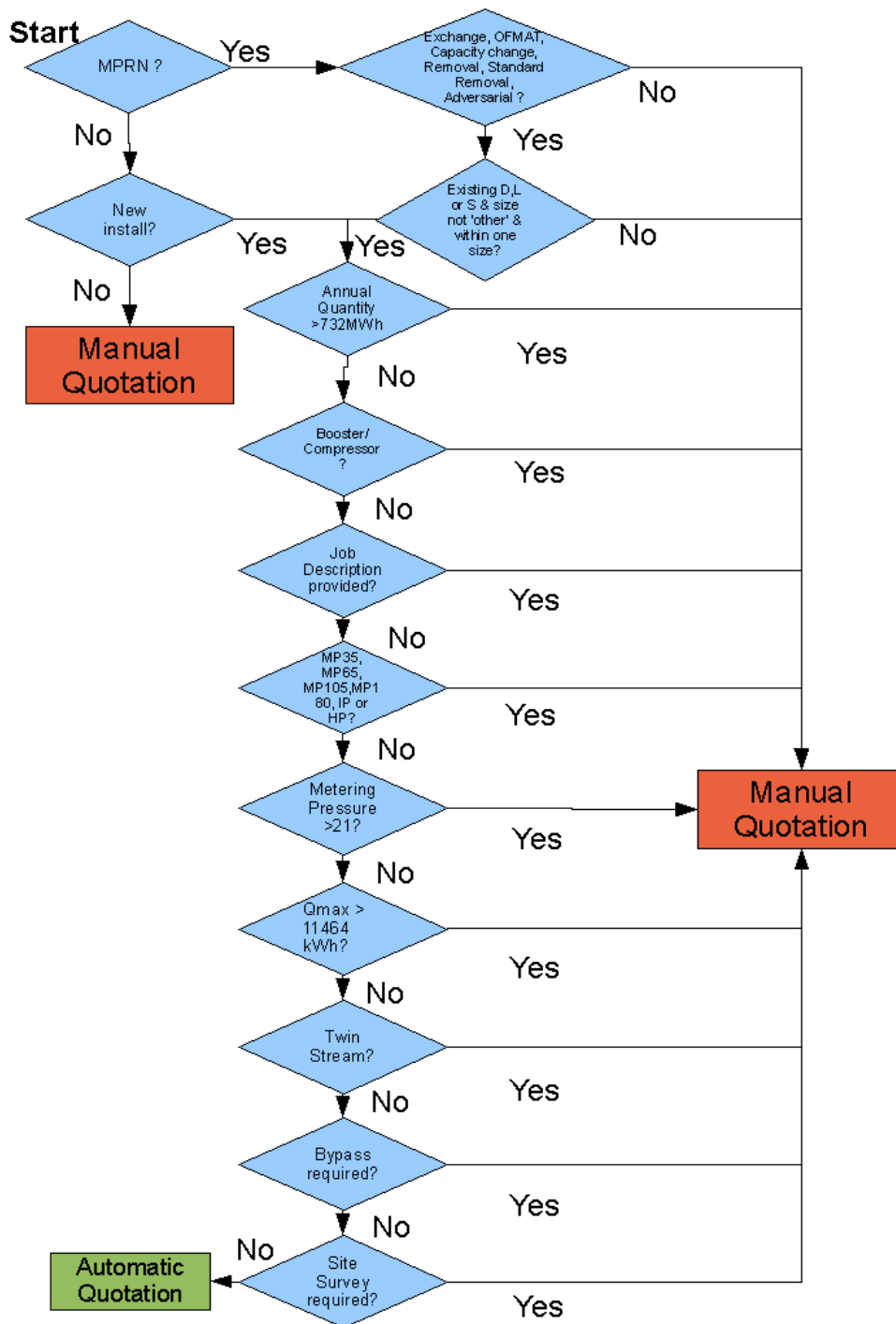
Illustration 5: Automatic or Manual Quotation Flow Chart

3.3.3 Automatic Quotation

Quotations are based on the system's ability to select meter modules that match the

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enquiry requirements.

3.3.3.1 Meter module selection

The webMIP system will identify and select Meter Modules that are suitable for quotation. Meter modules are selected using the following enquiry details:

- Inlet Pressure;   325

- Outlet Pressure(Required Meter Pressure);

- Qmax;

Each meter module is associated with a single housing and this is selected if the enquiry requests it.

Each meter module is associated with a single base and this is selected if the enquiry   330 requests it.

For Adversarial removal jobs, a caveat is placed in the automated quote stating that any purging costs will be transferred back to the customer after the job is completed in the form of a variation.

For enquiries without a housing option selected, the minimum housing dimension   335 requirements are provided.

3.3.3.2 Meter module quote

The system produces a quote for each selected meter module. Users can select each of the quotes provided and accept one. The following items of data are provided with each of the meter modules listed: 340

- Meter module name – The name/description of the meter module

- Module cost – the cost to the agent for the individual module

- Base cost – The cost of the base to the agent (if selected)

- Housing cost – The cost of the housing (if selected)

- Labour cost – The cost of the labour required to complete the job   345

- Lifting gear – The cost of required lifting gear (if required)

- Total cost – The total cost of the module and the chosen add-ons

- Contract Lead time – The number of days that the job must be completed within (after quote acceptance)

- Qmax – The Qmax value for the module, in KWh   350

- Housing size – The size of the housing required for the module

- Inlet orientation – The orientation of the inlet pipework

- Outlet orientation – The orientation of the outlet pipework

- Caveats – A list of caveats relating to the job

3.3.3.3 Meter module detailed report

Once a quote is accepted the system produces a more detailed report document containing a description of the module and the appropriate add-ons. The detailed report document contains the following data items:

- Module name – The name of the module
- Qmax – The Qmax value for the module, in kWh
- Qmin – The Qmin value for the module, in kWh
- Service Pressure – The service pressure category for the module (eg. LP)
- Meter Pressure – The meter pressure, mbar (eg. 21)
- Job completion date – The number of days that the job must be completed within (after quote acceptance)
- Dimensions – The width, depth and height of the module, in mm
- Weight – The weight of the module, in kg
- Inlet – The inlet orientation configuration
- Outlet – The outlet orientation configuration
- Module Cost – The cost of the module
- Caveats – A list of caveats relating to the job

An additional list of selected module add-ons is provided with the following data items displayed for each add-on:

- Accessory – The name of the add-on
- Cost – The cost of the add-on
- Lead time – The lead time (if appropriate) for delivering/fitting the add-on
- Dimensions – The width, depth and height of the add-on
- Weight – The weight of the add-on in kg

There is an additional total line for the list of add-ons, that totals the collective costs of the add-ons.

The system generates costs for the module dependant on the installation address. The regional structure will be based on postcode data provided by National Grid Metering I&C. See Appendix B for further information.

3.3.4 Manual Quote Generation

Where the system is unable to automatically produce a quotation, the system supports a manual process of uploading a quotation document generated off-line and making it available to the user. The system has no knowledge of the contents of the manual quotation.

3.4 Quote acceptance

The user searches for existing enquiries using the unique enquiry reference, transaction reference, post code or MPRN of an enquiry. The system limits the enquiries that can be queried to those associated with the supplier on whose behalf the user performs work: the queried enquiries may have been created by other users. The user is able to view the quote(s) associated with an enquiry where either the enquiry has been marked as 'quoted for' and the quotes have not lapsed (greater than 90 days) or the enquiry has been marked as 'complete'.

The user is able to select a quote and view the detailed report.

The user rejects quotes by selecting from the list and choosing the 'reject' option. The user is asked to enter a reason for the rejection. The user is given the opportunity to fill in a free text field of 250 characters and select from a list of the following reasons:

- Too expensive
- Lead time too long
- Used competitor
- No longer required
- Speculative enquiry
- Customer changed supplier

A rejected quote cannot be subsequently accepted. The system marks the enquiry as 'Rejected' if all quotes have been rejected.

The user accepts a quote by selecting from the list and choosing the 'accept' option. The system records the details of the user against the enquiry. The system marks the enquiry as 'Accepted'. An accepted quote cannot be subsequently rejected. An enquiry cannot have more than one accepted quote. The system uses email to contact the I&C department with details of the accepted quote(see the Communication section of this document for further information). At this point the system also provides the user with a list of possible forms that need filling in or what to do next.

 In all cases for quote acceptance webMIP will notify the user that the actual job SLA (post quotation acceptance) will only start after all drawings or necessary documents required to complete the job have been uploaded or delivered to I&C.

Quotes that have not been accepted or rejected lapse after 90 days. Quotes that have lapsed cannot be viewed by the user. The system marks the enquiry as 'Lapsed'.

3.5 System Process Map
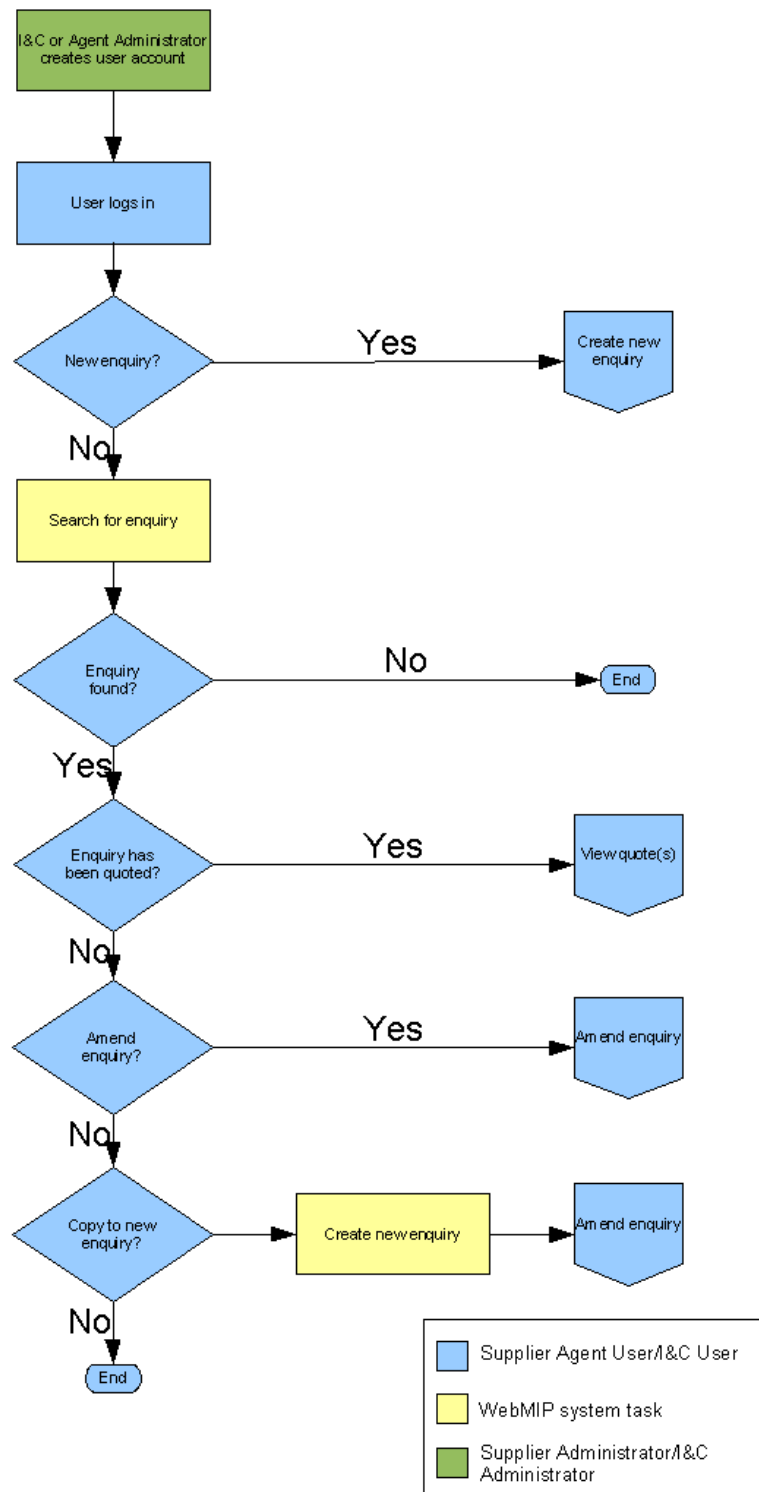
The following illustrations show the overall flow of the Quotation Processes.

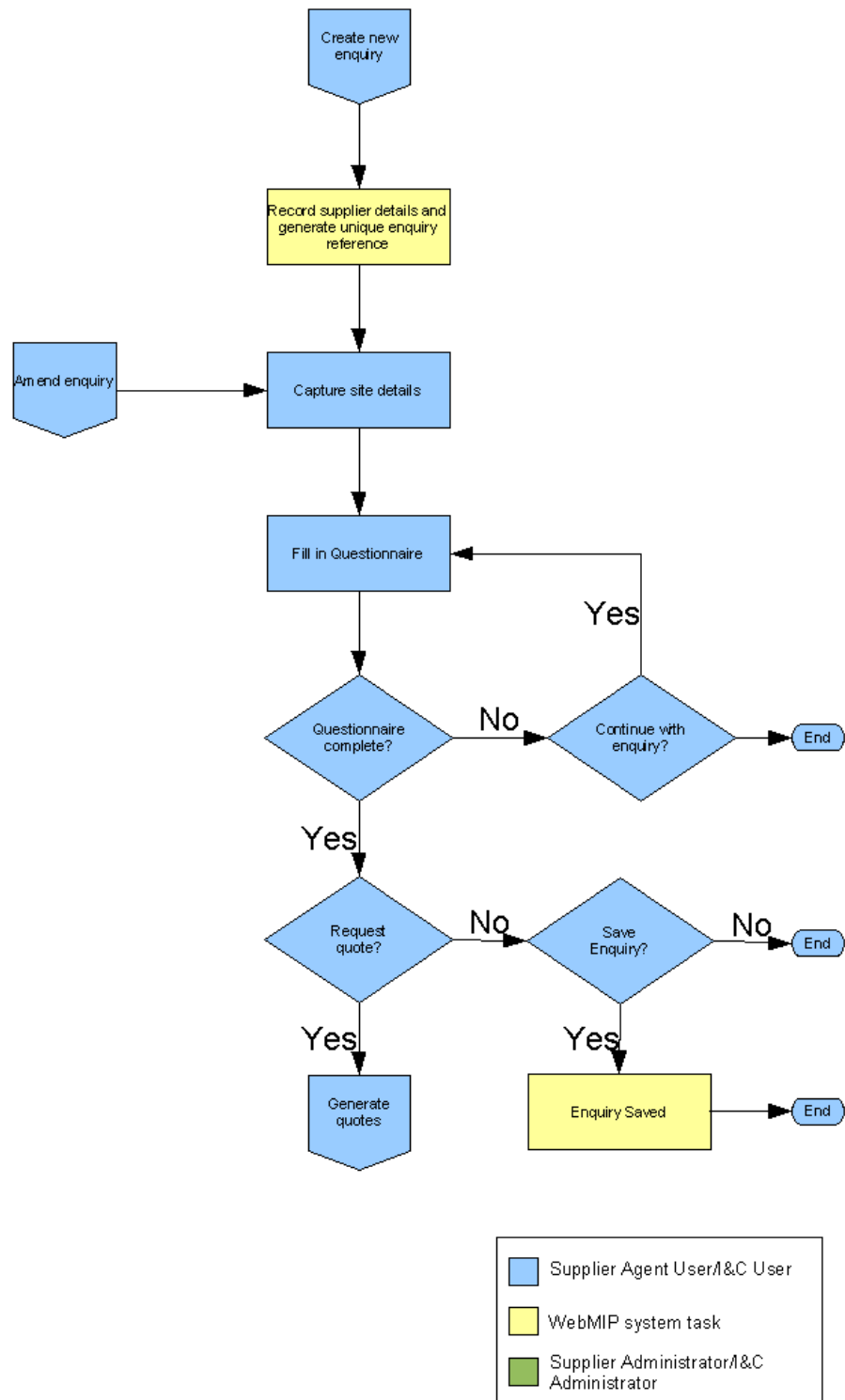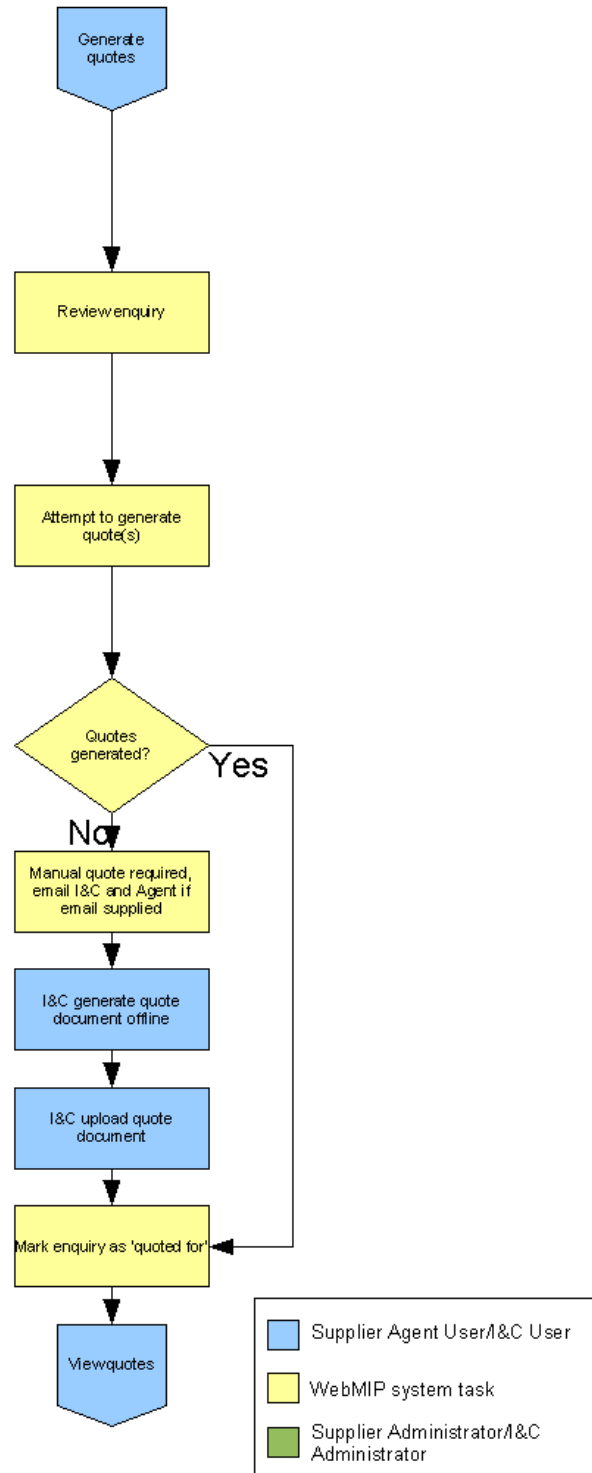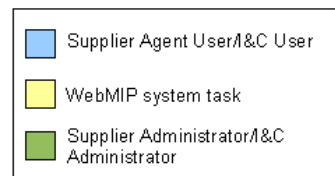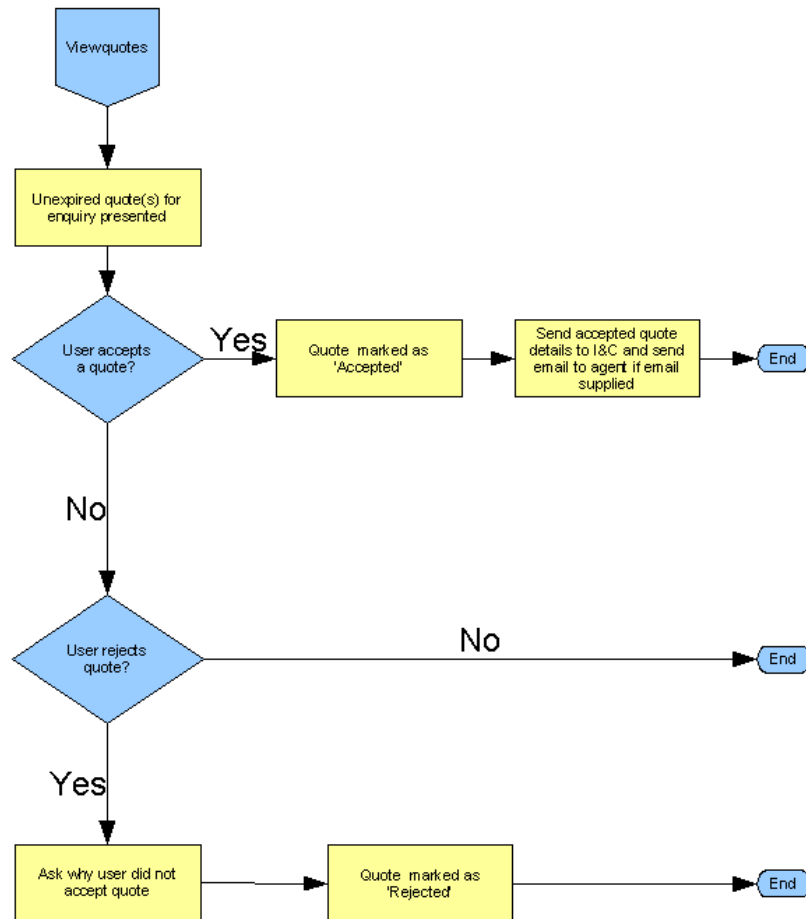*Illustration 6: System Process Map - Slide 1*

Illustration 7: System Process Map - Slide 2

Illustration 8: System Process Map - Slide 3

Illustration 9: System Process Map - Slide 4

4 Reporting

The webMIP system contains reporting options for all users of the system. Most of the reports take the form of lists of data from which decisions and choices are made. I&C build their own reports using the data export function of webMIP.

The following is a list of the purpose built reports that are included within the webMIP system.

4.1 Data Export

The system provides the webMIP administrator user with the ability to export all data in the webMIP system. The data is categorised by the logical groupings in which it is held within webMIP. The data is exported in CSV format and then used by I&C.

4.2 Automatic Quotes

The system generates quotes on request. The system initially generates a generic quote document for each meter module that matches the enquiry requirements. When a quote is accepted, the system generates a detailed quote document containing a description of the module, appropriate add-ons and detailed drawings. The quote is generated as a PDF file. All quotes are generated with National Grid Metering headers and footers.

Quotes without a housing option selected supply the minimum housing dimension details but no costing details are provided.

4.2.1 Generic Quote

A generic quote is a quote automatically generated by webMIP after the user has submitted their enquiry for quotation. The generic quote contains the following data:

- Base dimensions and generic diagram;
- Housing dimensions and generic diagram;
- Module dimensions and generic diagram;
- Module technical specifications;
- The Agent/supplier address details;
- Break down of costs and items (each line with an item and associated costs).

4.2.2 Detailed Quote

The detailed quote is provided to the user after accepting a Generic quote. The detailed quote contains further refinement and detail relating to the quote. The detailed quote contains the following data:

- Base details and dimensions with detailed diagram;
- Housing details and dimensions with detailed diagram;

- Module details and dimensions with detailed diagram;

- Module technical specifications;

- The Agent/supplier address details;

- Break down of costs and items (each line with an item and associated costs).

4.3 User specific Reports

4.3.1 View Of Accepted Quotes

The system provides a list of accepted quotes displayed in date accepted ascending order. The report is available to the webMIP administrator, I&C User and I&C Customer Services users. The fields displayed for each quote is as follows:

- Quote reference number;

- Supplier Name;

- Agent name;

- Date quote accepted.

View Of Quotes Pending Manual Quote

The system will provide a view of all quotes that require a manual quote to be uploaded, all quotations with a status of 'In progress'. The quotes will be displayed in date (submitted for quotation) ascending order. The report is available to the webMIP administrator, I&C User and I&C Customer Services users. The fields displayed for each quote is as follows:

- Quote reference number;

- Supplier Name;

- Agent name;

- Date submitted for quotation.

4.3.2 Supplier Administrator

The Supplier Agent role will have a view of all related Supplier Agents.

4.3.3 Supplier Agent

The Supplier Agent role will have available the following data views :

- Enquiries that they have created or have been created by other agents associated with the same supplier;

- Quotes that they have created or have been created by other agents associated with the same supplier, these will be viewable for up to 90 days from generation.

4.3.4 I & C Customer Services

The I & C Customer Services role will have available the following data views :

- All enquiries that have been created within the system;

- All quotes that have been created, these will be viewable for up to 90 days from generation.

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4.3.5 I & C User

The I & C User role will have available the following data views :

- All enquiries that have been created within the system;

- All quotes that have been created, these will be viewable for up to 90 days from generation.

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4.3.6 The WebMIP Administrator

The webMIP Administrator role will have available the following data views :

- All enquiries that have been created within the system;

- All quotes that have been created.

5 System Administration

The webMIP system holds data used in the process of providing quotations for Supplier agents. This data requires administrative functions to keep it correct and up-to-date. The system also manages the users and provides a method for producing system reports.

5.1 System data

The webMIP administrator role is able to administer system data to ensure that values, descriptions and other details are correct and up-to-date. The role can also create, read, update and delete the system data.

The data administered includes the following:

- Meter Modules. See Appendix B for details;

- Housing. See Appendix B for details;

- Base. See Appendix B for details;

- Pricing data. See Appendix B for details;

- Users. See section 2 Users, Roles and Security;

- Reporting. The system allows the webMIP administrator role to run the system data reports. The webMIP administrator role selects the system data sources and exports them as CSV files.

Bulk Upload

The webMIP system provides a bulk upload function for the uploading of system data this function will only be available to the webMIP Administrator user role. The bulk upload function will accept a CSV file containing data described in Appendix B . When the bulk upload routine is completed the entire system data set will be replaced by the data provided in the uploaded CSV file. If the uploaded file does not pass the webMIP bulk upload validation routine then the bulk upload will fail and the exist system data will remain in place.

5.1.1 User Acceptance

A process out side of the scope for webMIP will allow I&C to attempt a bulk upload run, on a user acceptance version of webMIP to confirm that the upload is successful. This way the bulk upload can be tested without impacting on the live system.

6 System Communication

The webMIP system communicates with the users through their web browser and Email. Screens are provided for the administration, enquiry and quotation process. In addition to these screens webMIP is able to email users at key points during the on-line quotation life cycle. Where the third-party requires communications to be via telephone, fax or the post this is performed manually by I&C staff.

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6.1 Web Browser

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The system uses a web browser user interface for all functions associated with the user viewing or entering data. The system screens and contents will be discussed in detail during the design stage of the project. The screens representing the webMIP system will provide an interface for the users to enter the data described in Appendix A.

6.2 Email

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The webMIP system uses email to communicate with the I&C team and Agents.

When webMIP delivers an email, the 'From' part of the email refers to a mailbox within I&C. This allows I&C to check email failures (bounced or returned email) and ensures that user responses to system generated emails are received by I&C.

The email aspects of the webMIP system are used at specific points within the quotation life cycle. There are two key points at which email is employed; the request for quotation and the quotation acceptance.

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6.2.1 Request For Quotation

During the quotation stage (request for quote submitted) the system communicates either directly to the agent user and/or the I&C team. The method depends on the type of quote:

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6.2.1.1 Automatic Quotes

Enquiries that can be automatically quoted for are presented to the user once their on-line request has been submitted. If the user has specified email as a preference for communication the system will email the quote details to the user. If an I&C user enters the details of the enquiry on behalf of the agent then the communication preference set on the agents profile will be used. If any other communication option is selected as a preference, the system sends an email to the I&C team; the I&C team then performs the communication manually.

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6.2.1.2 Manual Quotes

Where the system has been unable to produce an automatic quote, the system emails the I&C team requesting that a manual quote be produced. The system also sends an email to the user stating that a manual quote will be provided.

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6.2.2 Quotation Accepted

When a quote is accepted the system can send up to three types of email depending on the type of quote and the agent users communication preference settings:

6.2.2.1 I&C

If the enquiry produced an automatic quote, the email contains a PDF of the detailed quote. For manual quotations the file previously uploaded by I&C will not be sent as an email attachment to the supplier agent as this file will already be held within the I&C off-line systems. In all cases the email contains the Quote Reference number and a link to the quote on the webMIP system. Manual and automatic quote emails are sent to different mail boxes.

6.2.2.2 Agent

If the agent accepting the quote has specified email as their communication preference, webMIP sends an email to their specified email address. If the quote is an automatic quote the email will contain a PDF of the final detailed quote, otherwise the email will contain the quote file uploaded by the I&C user. The email also contains a link to the quote held within webMIP, a list of reminder items and details on what to do next.[1]

Appendix A: Data Items

A.1 Gas Supplier

Gas Supplier ID (A0064)	A required 10 Character alphabetical code
Gas Supplier Name	A required alphanumerical field of 40 characters in length
Gas Supplier Location	A required address for the gas supplier, including the traditional items associated with an address
Cust Code	A required 3 digit numerical code, that describes the customer supplier.
Contract Reference	The provision and maintenance contract a required alphanumerical code. Limited to 35 characters.

A.2 Supplier Agent

Company Name	A required 40 character data item to record the agents company name
Title (A0088)	A required 6 character item to collect the individual agents title, e.g. Dr, Mr, Miss
Initials (A0089)	A required 2 character item to collect the individual agents initials
Contact Name (A0090)	A required 10 character data item to hold the individual agents name
Address (A0049,A0106)	A required address for the individual agent, including the traditional items associated with an address
Telephone1(A0049,A0106)	A required initial telephone number to contact the individual, a 30 char limit.
Telephone2(A0049,A0106)	An optional data item for an alternative telephone number to contact the individual, a 30 char limit.
Fax(A0049,A0106)	An optional item that allows the agent to

	specify a fax number, a 30 char limit.
Email(A0049,A0106)	An mandatory alphanumerical item to accept the individual agents email address, the value must be a valid email address. A 241 char limit.

A.3 Job Site Details

Transaction Reference(A0055)	An optional 35 character alphanumerical code that the agent can use to reference to the job enquiry. This value does not have to be unique within the system, if the user searches for the transaction reference then multiple enquiries/quotes may be returned.
Agent	Only available to the I&C user and mandatory for the I&C user. A list of Agents held within the webMIP system. The user must select one.

A.4 Address

Sub-Building Name/Number (A0004)	A 40 character alphanumeric item that must contain a data entry if Building Name/Number is omitted.
Building Name/Number (A0006)	A 40 character alphanumeric item that must contain a data entry if Sub-Building Name/Number is omitted.
Thoroughfare(Road) (A0008)	A 60 character alphabetical data item that must be entered.
Post Town(Town) (A0011)	A 40 character alphabetical data item that must be entered.
Post Code (A0013)	A 10 character alphanumerical data item that must be entered.
Title (A0088)	A required 6 character item to collect the individual agents title, e.g. Dr, Mr, Miss to be selected from a list.
Initials (A0089)	A required 4 character item to collect the

	individual consumer contacts initials
Contact Name (A0090)	A required 30 character data item to hold the individual consumer contacts name
Telephone1(A0049,A0106)	A required initial telephone number to contact the consumer, a 30 char limit.
Telephone2(A0049,A0106)	An optional data item for an alternative telephone number to contact the consumer, a 30 char limit.
Fax(A0049,A0106)	An optional item that allows the agent to specify a fax number, a 30 char limit.
Email(A0049,A0106)	An optional item to accept the individual agents email address, a 241 char limit.

A.5 Contact Address

Sub-Building Name/Number (A0004)	(only required if job address different to contact address)A 40 character alphanumeric item that must contain a data entry if Building Name/Number is omitted.
Building Name/Number (A0006)	(only required if job address different to contact address)A 40 character alphanumeric item that must contain a data entry if Sub-Building Name/Number is omitted.
Thoroughfare(Road) (A0008)	(only required if job address different to contact address)A 40 character alphabetical data item that must be entered.
Post Town(Town) (A0011)	(only required if job address different to contact address)A 40 character alphabetical data item that must be entered.
Post Code (A0013)	(only required if job address different to contact address)A 7 character alphanumerical data item that must be entered.
Second Contact	A boolean entry that allows the user to specify if there is a second contact for the site.

Title (A0088)	(only required if second contact specified)A required 6 character item to collect the individual agents title, e.g. Dr, Mr, Miss to be selected from a list.
Initials (A0089)	(only required if second contact specified)A required 4 character item to collect the individual consumer contacts initials
Contact Name (A0090)	(only required if second contact specified)A required 30 character data item to hold the individual consumer contacts name
Telephone1(A0049,A0106)	(only required if second contact specified)A required initial telephone number to contact the consumer.
Telephone2(A0049,A0106)	(only required if second contact specified)An optional data item for an alternative telephone number to contact the consumer.
Fax(A0049,A0106)	(only required if second contact specified)An optional item that allows the agent to specify a fax number.
Email(A0049,A0106)	(only required if second contact specified)An optional item to accept the individual agents email address.

A.6 Second Contact Address

Second Contact address is the same as job address/first contact. It is only required if second contact specified. A selection entry allows the user to specify whether the address is the same as the site of the intended works or the first contact.

Sub-Building Name/Number (A0004)	(only required if job address and first contact address different)A 40 character alphanumeric item that must contain a data entry if Building Name/Number is omitted.
Building Name/Number (A0006)	(only required if job address and first contact address different)A 40 character alphanumeric item that must contain a data entry if Sub-Building Name/Number is omitted.

Thoroughfare(Road) (A0008)	(only required if job address and first contact address different)A 40 character alphabetical data item that must be entered.
Post Town(Town) (A0011)	(only required if job address and first contact address different)A 40 character alphabetical data item that must be entered.
Post Code (A0013)	Only required if job address and first contact address different)A 7 character alphanumerical data item that must be entered.

A.7 Site Detail

Asset Location Code (A0059)	A 10 character alphanumerical data item that must be entered, it will be one value from a list of the following specified entries: 00 Unknown 01 Cellar 02 Under Stairs 03 Hall 04 Kitchen 05 Bathroom 06 Garage 07 Canteen 08 Cloakroom 09 Cupboard 10 Domestic Science 11 Front Door 12 Hall Cupboard 13 Kitchen Cupboard 14 Kitchen under sink 15 Landing 16 Office 17 Office Cupboard

	18 Outside WC
	19 Pantry
	20 Porch
	21 Public Bar
	22 Rear of Shop
	23 Saloon Bar
	24 Shed
	25 Shop Front
	26 Shop Window
	27 Staff Room
	28 Store Room
	29 Toilet
	30 Under Counter
	31 Waiting Room
	32 Meter box Outside
	98 Other
	99 Outside
Care category	An optional 2 character numerical data type for all job types the user can select from the following list:
	03 SEUC Unclassified
	04 Aged 60+
	05 Blind
	06 Braille User
	07 Poor Sight
	08 Deaf
	09 Poor Hearing
	10 Poor Speech
	11 Poor Sense of Smell
	12 Arthritic Hands
	13 Arthritic All
	14 Poor Walking
	15 Wheelchair

	16 Bedridden
	17 Mental Handicap
	18 Confused
	19 Serious Illness
	20 Other
	21 Heart Condition
	22 Breathing Difficulty
Asset Location notes (A0158)	
Mechanism for delivering Location notes	A optional selectable list of values including Post, Fax, Email and Upload. Depending on the selected option the system will provide either the Coventry Address for I&C, the I&C fax number, A mailto link to the I&C mailbox or a file upload option.
Attach files	(only required if Mechanism for delivering Location notes is set to Upload)An optional data item that allows users to attach a number of photos,drawings,plans etc. to the enquiry, the file size limit will be 10 megabytes in total with individual files being restricted to 3 megabytes.
Access Instructions (A0075)	An optional data item of 210 alphanumerical characters.
Access Password	An optional 30 character alphanumerical data item.
MPRN (A0072)	An optional 30 digit numerical data item. The MPRN is optional, but ideally I&C would like to collect the number. New installs do not require the number to be entered because the number may not have been generated at the time of the enquiry. However for all other jobs this should normally be entered, but sometimes it is unavailable. The user must enter additional information in these instances.
Additional Information, including UIP reference	Required only if MPRN is left blank and the job type is not a new install. A 250 character alphanumerical data item.

A.8 Job Information

The job information section records data relating to the job requirements including meter requirements and the meters environment. Like the job site details, once the job information details are submitted they are stored by the system so that the agent or I&C users can then refer back to them.   Each enquiry must have just one associated set of job information.

Job Type (Q5)	A list of possible jobs (Install, Exchange, Removal, Alteration, OFMAT, EMS, AMR, Capacity Change, Adversarial, Standard Install, Standard Exchange, Standard Removal, Other), if the user selects 'Other' then they must provide some data for the Other Type data item. The Job Type can be changed on the enquiry until the enquiry is submitted for quotation.
	The Standard job types are categorised differently by webMIP, they show the users intention to create a standard quotation for an automatic quote. Standard job types exempt the user from entering certain questions in the enquiry questionnaire, see illustration 2 .
Other Type	Required only when the user selects 'Other' from the Job Type list. An alphanumerical data item of 30 characters.
Internal Job Type Reference	A hidden field automatically generated by the webMIP system. Only when the questionnaire has been successfully completed will webMIP attempt to generate the Job Type Reference. The Job Type Reference is an alphanumerical field of 40 characters in length. The webMIP system will use the Job Type and Service pressure data items on the questionnaire to determine the Job Reference Code, the result will be one of the following values :-

Job Reference Code	Description
FIX QO LP	Install Low Pressure Meter Module
FIX QO MP	Install Medium Pressure Meter Module
EXC QO LP	Exchange Low Pressure Meter Module
EXC QO MP	Exchange Medium Pressure

		Meter Module
	EXC QI MP	Pressure Increase of Medium Pressure Meter Module
	REM QO LP	Removal of Low Pressure Meter Module
	REM QO MP	Removal of Medium Pressure Meter Module
	If webMIP is unable to determine a Job Reference Code then the value will remain blank(null).	
Gas Act Owner(GAO)	Required if the Job Type is of Exchange, Removal, Standard Exchange or Standard Removal, otherwise it should be optional. A 1 character alphabetical data item.	
Supplier	Required if the Job Type is of Exchange, Removal, Standard Exchange or Standard Removal otherwise it should be optional. A 210 character alphanumerical data item.	
Consumer	Required if the Job Type is of Exchange, Removal, Standard Exchange or Standard Removal otherwise it should be optional. A 40 character alphanumerical data item.	
Appointment preference	Only relevant to the Standard job types that will be automatically quoted. An optional data item that allows the user to specify an preferred time in the day for the visit. The default value will be 8am-8pm. Users can select one value from a list of the following options: • 8am-1pm, • 12pm-8pm, • 8am-8pm.	
Service Pressure (Q6)	Required for Job Types of Install, Pressure Change, Alteration, Capacity Change and Relocate, optional for all other jobs. User will be able to select one option from a list of the following items, LP, MP35, MP65, MP105, MP180, MP270, IP. The service pressure is not needed for Standard (automatically quoted)Job Types as an assumed pressure category is taken.	
IP details	Required if the service pressure is IP. A 250 character	

	alphanumerical data item. The default value is blank(null).
IP mbar	Optional, available when service pressure is set to IP. A Numerical data item that allows up to 3 decimal places. The values that are accepted must be between 2000 and 7000. The default value is blank(null).
Required Meter Pressure (A0164) (Q7)	A required numerical data item for all jobs except that it is not required for standard job types as it will be assumed. Allows numbers between 0 and 7000, 3 decimal places are permitted. The value to be stored will be in mbar. If the service pressure is 'LP' then the default for meter pressure will be 21. The following service pressures also place further constraints on the accepted meter pressure values:

	Service Pressure	Calculation for constraint	Constraint
	MP35	0.8 x 35	<=28
	MP65	0.8 x 65	<=52
	MP105	0.8 x 105	<=84
	MP180	0.8 x 180	<=144
	MP270	0.8 x 270	<=216

Annual Quantity (AQ) (Q8)	A Required numerical data item for all jobs . The value for annual quantity will be recorded as KWh. The default value for is blank(null). If the field contains a value over 732,000 the enquiry will be not be automatically quoted.
Specific conversion factor	A 1 Character hidden field that is used to determine if a conversion factor is required. This will typically be associated to jobs that require a large capacity. The user will not interact with this field as webMIP will determine the value. The default value is 'N' if the Annual Quantity field is greater than 732,000 KWh then the value will be 'Y'
Booster/Compressor (Q9)	A boolean data entry with a default status of null. The user will specify a 'Y' or 'N' value. A value is required for all job types, however booster/compressor is not needed for Standard Job Types. If the user answers 'Y' the enquiry will become bespoke and a manual quotation will need to be provided.
Indicative Substantial	A date format data item, dates will be entered in the format

Completion Date(A0138) (Q10)	dd/mm/yy, e.g. 21/10/07. This is an optional item for all job types. The date will be stored in webMIP in the format 'YYYYMMDD' the value will be 8 characters in length.
Other Related Jobs(Project Reference) (Q11)	An optional alphanumerical data item of 40 characters.

Additional Services (Q12)	A list of options that the user has to request or decline. All of the additional services require a mandatory response. Each option requires the user to select 'Y' or 'N', by default the options will be blank(null). The options that will be available are as follows :
	
	● Housing - If 'N' is selected the user must fill in an associated alphanumerical data item of 250 characters
	
	● Base
	
	● Converter – Is de-selected if the user selects Logger
	
	● Logger – Is de-selected if the user selects Converter
	
	● AMR
	
	● EMS
	
	● By-pass - If By-pass is set to 'Y' then one of the following additional data items must be selected
	
	   o Essential (Hospital, prison, etc.)
	
	   o Institution (School, college, etc.)
	
	   o Animal welfare
	
	   o Manufacturing process requirement
	
	   o Complicated pipework system
	
	   o Other. If 'Other' is selected then the user must fill in an associated alphanumerical data item of 40 characters, to describe the reason.
	
	● Twin stream. If 'By-pass' is selected but twin stream is not selected then the system will warn the user has not selected 'Twin Stream'.[2]

Logger/Converter	A 1 character alphabetical data item that is hidden from the user. The webMIP system will select the value for this field. If Logger is selected from the additional services data item then webMIP will store a 'L' if Converter is selected then webMIP will record a 'C'. The default value will be blank (null).

Job Description/Special Instructions (Q9a)	An optional 500 character alphanumerical data item that the user can specify any job specific requirements. If the user has entered data in the job description/special instructions data item then an automatic quote will not be possible, the users should be warned of this prior to submitting their data.
Measuring Capacity QMAX (A0112) (Q13)	A mandatory numeric data item that accepts numbers between the range of 0 to 999,999.999, up to 3 decimal places are allowed. The default value will be blank(null). The value stored will be measured in KWh.
Measuring Capacity QMIN (A0112) (Q13)	An optional numerical data item that accepts numbers between the range of 0 to 999,999.999, up to 3 decimal places are allowed. The default value for QMIN is blank(null). The value stored will be measured in KWh.
Load Control Type (Q13a)	Mandatory for all install and exchange job types(including standard), optional for all other job types. The default value will be blank(null). The user will be able to select one item from the following list: • Constant • On/Off • Modulating
Meter Size (Q14)	Only relevant for the Standard Install Job Type, an optional data item. If Qmax is empty then Meter Size must have a value selected. The user can select one item from the following list: • U16 • U25 • U40 • U65 • U100 • U160
Meter Type Existing(A0025) (Q15)	Mandatory for all job types except for Standard Install, Install, EMS, AMR, Other job types, optional for all other job types. The user is able to select one item from the following list: • D - Diaphragm (unknown material) • L - Leather

	S - Synthetic
	U - Ultrasonic
	Z - Unknown
	R - Rotary
	T – Turbine
	The data item will be restricted to 8 characters in length.
Existing Meter Size (Q15)	Mandatory for all job types except for Standard Install, Install, EMS, AMR, Other job types, optional for all other job types. The user needs to select one from the following list: • U16 • U25 • U40 • U65 • U100 • U160 • Rotary/Turbine 2" • Rotary/Turbine 3" • Rotary/Turbine 4" • Rotary/Turbine 6" • Other If other is selected then the job will be bespoke.
Existing Asset Serial Number (A0022)	A 30 character alphanumerical data item that is Mandatory for the following job types: Exchange, Standard Exchange, Removal, Standard Removal, OFMAT, Alteration, EMS and AMR. The default value will be blank(null)
Model Code/Number(A0083)	A 20 character alphanumerical data item that is optional for all data types, however it is not relevant to the 'install' or 'Standard Install' job types.
Market Sector Code(A0161)	An optional data item for all job types, defaulting to the value 'I'. The user can select one item from the following list: • I - Industrial and Commercial • D - Domestic

Other Information	A 250 character alphanumerical data item that is optional for all job types. In addition the facility to add relevant files to the enquiry will also be made available.

Appendix B: System Data

The system data descriptions provided in this appendix determine the information stored within webMIP for Meter Modules, Housing, Base and pricing elements. These elements will be controlled through the administration functions provided by webMIP.

B.1 Meter Modules   600

The meter modules will have the following data items:

Module Unique identification number	
Rig drawing reference number	
TMS Module Reference	
Manufacturers identification	
Manufacturers module reference	
Dimensions A to H	
Module weight in kg	
Module current or past	
Date module model cancelled	
Inlet Pressure	
Service pressure	
Module outlet pressure(Required Meter Pressure)	
Module inlet orientation	
Module inlet height	
Module inlet size	
Module inlet connection type	
Module outlet orientation	
Module outlet height	
Module outlet size	
Module outlet connection type	

Module filter size	
Module filter type	
Module regulator size	
Module regulator type	
Module regulator lock up setting	
Module slamshut size	
Module slamshut type	
Module slamshut setting	
Module relief valve size	
Module relief valve type	
Module relief valve setting	
Module Qmax	
Module Cost	
Kiosk Price	
Module delivery cost	
Module control type	
Module Notes	
Compatible housing reference	
Alternative housing	
Base Reference	
Meter Reference	
Lock Up	
Control	
Notes	

B.2 Housing

Housing Unique reference number	
Housing Reference	
Housing Type (Wall Mounted / Lift Off / Walk in / Walk Through)	
Housing type reference for drawing	
Housing dimension L	
Housing dimension W	
Housing dimension H	
Housing Weight	
Number of doors	
Manufacturer ID	
Housing Ventilation type	
Total area of ventilation high and low	
Housing Cost	
Housing Delivery Cost	
Manufacturer	

B.3 Base

Base Reference	
Base Drawing Reference	
Length of Base	
Width of Base	
Depth of Base	
Cost of base	
Dimensions A to I	

B.4 Pricing Data

To be Confirmed

Module ref, Region and Cost?

1   (***Question 21,I&C to specify what the user is reminded about)
2***DH or GW to provide appropriate text.