

Project Name: Digital Meters IT Support – IT09

Description: Trial of Digital Meters

The costs of remotely-read digital gas meters are decreasing steadily. In addition, digital gas meters have the potential to deliver a range of benefits, by improving the efficiency, safety and reliability of the distribution network. Accordingly, digital meters are expected to provide net benefits compared to the current manually-read mechanical meters within the next five year period.

For MG to be ready to deploy this new metering technology, it is necessary to undertake trials to gain practical experience and tangible evidence of the real costs and benefits.

Multinet (MG) is already operating a small trial of remotely-read digital gas meters in its distribution area. In the next regulatory period, MG plans to increase the size of the trial to 10,000 meters. The objective of the trial is to better understand the potential costs and benefits of the widespread deployment of digital meters.

The background, scope and rationale for the digital meter trial is presented in the document 'Capital Expenditure Overview – Digital Gas Metering Pilot Study'.

Whilst the trial may produce some limited immediate benefits, the main objective of the trial is for MG to gather detailed evidence so that it can take advantage of the capabilities of remotely-read digital meters as early as possible.

IT Systems Project

Operating a 10,000 trial of remotely-read digital meters requires IT systems capability in the areas of:

- Meter and communications network management;
- Meter data management;
- Customer configuration management; and
- Analytics and reporting.

For the trial, MG will enter into an arrangement with UE to utilise the existing IT applications already in operation within United Energy (UE) for its Advance Metering Infrastructure (AMI) deployment. While some modifications to these systems will be necessary, the use of the UE systems will allow the trial to be carried out with reduced IT cost and risk.

A limited number of modifications will be made to the systems to:

- Add a new meter type in the customer management system (SAP ISU)
- Ensure that the trial of digital meters does not impact the transactions sent to retailers and/or the market operator;
- Allow interception of service order requests for reconnections and disconnections so that they can be manually processed via the meter and network management system;
- Allow interception of special read requests so that they can be processed manually; and
- Extract, transform and load meter reading and event information.

Strategic Alignment:	<p>This IT project will support the Digital Meter trial. The strategic drivers for the trial are to:</p> <ol style="list-style-type: none">1. Ensure ongoing performance, resilience and safety in the changing distribution network2. Improve asset planning and management through analytics and reporting3. Ensure readiness to achieve regulatory requirements
Options:	<p>All credible options to meet the key drivers of this project have been assessed:</p> <ol style="list-style-type: none">1. Implement separate stand-alone systems for MG2. Utilise UE's existing IT AMI systems3. Use manual processes
Rationale:	<p>The recommended option is:</p> <ol style="list-style-type: none">2. Utilise UE's existing IT AMI systems <p>Option 1 – 'Implement separate stand-alone systems for MG' is not recommended because of the relatively high cost and risk of implementing new IT systems specifically for MG.</p> <p>Option 2 – 'Utilise UE's existing IT AMI systems' is the recommended option as it makes maximum use of existing systems and allows MG to support the digital meter trial at relatively low cost and risk.</p> <p>Option 3 - 'Use all manual processes' is not recommended as this would not enable the trial to achieve its objectives of gaining practical experience of the true costs and implications of operating digital meters in MG.</p>
Timing:	2018
Cost:	<p>\$0.594M</p> <p>The above costs are required to make the necessary modifications to systems as outlined in the 'Description' section above. No additional hardware or software will be required for the project. All of the above costs are labour costs to cover:</p> <ul style="list-style-type: none">• Project management (including project management office and security)• Technical subject matter experts/analysts• Business subject matter experts• Change analyst• Solution lead• Solution analyst/developer• Integration developer• Testers
Notes:	<p>Estimates assume the following:</p> <ul style="list-style-type: none">• Existing IT systems will be used with only minimal change and reconfiguration;• No new IT systems will be introduced; and• Analytics and reporting will use the existing Information Hub system and will be supported by the 'Information.Next' team within IT.