



Review of governance structures and processes for capital expenditure

MULTINET GAS

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Abbreviations and definitions

Term	Definition
AA	Access Arrangement
AAI	Access Arrangement Information
AER	Australian Energy Regulator
APM	Association of Project Management
CEO	Chief Executive Officer
CFO	Chief Financial Officer
CIC	Customer Initiated Connections
CIRB	Capital Investment Review Board
D&C	Design and Construct
DOA	Delegation of (financial) Authorities
GAAR	Gas Access Arrangement Review
GCWSC	Gas Capital Works Steering Committee
HSE	Health, Safety and Environment
IT	Information Technology
MG	Multinet Gas
NGR	National Gas Rules
NPV	Net Present Value
OMSA	Operational and Management Services Agreement
PPE	Project Performance Engineer (a role within MG)
SCADA	Supervisory Control and Data Acquisition
UE	United Energy
USAIFI	Unplanned System Average Interruption Frequency Index

Executive summary

Jacobs Group (Australia) Pty Ltd (Jacobs) has been engaged by United Energy Distribution Pty Ltd and Multinet Gas Distribution Partnership (collectively Multinet Gas, or MG) to review Multinet Gas' capital investments (capex) governance systems used in MG's Victorian gas distribution network.

The purpose of the review is to determine whether MG's governance systems used in the selection and execution of capex projects meets the requirements of the National Gas Rules (NGR) and is in accordance with good practice.

Selection of projects

Multinet Gas is cognisant of the requirements of NGR Rule 79 and believes its capex naturally fits under the necessary categorisations. Mains replacement is the largest category of expenditure and is undertaken under a strategy which explicitly references drivers that are included in the NGR categories. Customer Initiated capex will necessarily be categorised as to meet the service needs of existing demand under Rule 79(2)(c)(iv).

Multinet Gas utilises appropriate assessments of projects including business cases and economic assessments for projects that are not driven by other requirements. The other requirements are regulatory (eg meter replacement), safety (eg pipe replacement) or service continuity (eg asset replacement upon field failure).

Projects are initiated by the networks asset ownership structure and the project is managed (owned) by the asset owner through MG's project selection and approval stages.

Approval of projects

Multinet Gas has processes for approving projects for implementation that are appropriate, and financial controls and delegations of authority related to the projects are considered robust.

The governance structure for the approval of large projects include the Capital Investment Review Board and for smaller projects includes sign-offs by the key stakeholders.

Implementation of projects

Multinet Gas outsources the execution of projects to one of the two service providers with whom it has a term agreement – Comdain and ZNX. For projects greater than \$1M, projects quotes are requested from both providers. Projects of less than this amount are let to the relevant service provider based on the geographic region but reviewed for reasonableness of cost with Multinet Gas using an independent cost estimation service to review costs. Responsibility for project delivery, including project management, rests with the service provider. Multinet Gas maintains a governance regime over the projects in the execution stage including project sponsorship within Multinet Gas and a project "board" or steering committee structure to which the project manager and sponsor report and which make decisions regarding the project delivery. Additionally the service agreements contain governance provisions for the overall agreement incorporating both counter-parties.

The Multinet Gas system has appropriate governance features as recommended in project management best-practice guidelines including that (i) the project structure is outside the operating structure, (ii) that the supervisory structure has representation from the prime stakeholders and (iii) the supervisory structure has the authority to make decisions on the project, subject to the financial delegation authorities.

Jacobs recommends that Multinet Gas adds the following additional arrangements:

- Jacobs recommends that Multinet Gas enhance the linkages to the Rule 79(2) criteria by documenting the categorisation(s) of Rule 79(2) justifying the capex explicitly as part of the approval process.

- The visible reporting structure at lower levels is dominated by reporting on project financial outcomes. The reporting at Board/Shareholder level has more KPIs reported on. MG should standardise reporting by the project manager to the governance structure on non-financial project management measures (time, quality, delivery of objective, personnel, safety etc) as well as the financial KPIs. This can be by exception (and could include for example “traffic light” colouring for rapid exception identification) with the reporting categories to be selected by the project governance structure. It is recommended that the GCWSC charter and Project Governance Meeting arrangements are expanded and further developed to formalise reporting lines consistently through to Board level on all relevant KPIs. More detail should be provided in lower level reports, with higher level reporting being progressively more summarised or by exception or based on scale or risk levels
- As a corollary of the above, enhanced reporting by the Service Provider’s project manager would help improve the documentary record by clarifying the Project Governance Meeting minutes, which are difficult to interpret for non-attendees.
- The MG procedure for whether a post implementation review is undertaken is still in draft, this should be finalised and implemented. MG advise that this is being reviewed as part of the review of UE’s processes.
- Procedures under development (such as the project management framework being developed at UE) should be finalised and implemented at MG (after tailoring to MG’s needs)
- MG’s processes should be clear as to the circumstances where it is considered acceptable to only use a single price in the project evaluation (versus obtaining two prices or a single price plus an Independent Estimator’s estimate).
- It is recommended that a specific test against Rules 74 and 79 of the NGR is included in the project selection process documentation, where the specific criterion within the rules that is attributed to the selection of each project is clearly identified.

Multinet Gas’ sign-off process for project hand-back to the operating structure is considered appropriate.

Important note about your report

The sole purpose of this report and the associated services performed by Jacobs is to opine on the adequacy of Multinet Gas' capex governance arrangements. This review is undertaken on behalf of Multinet Gas in accordance with the scope of services set out in the contract between Jacobs and Multinet gas.

In preparing this report, Jacobs has relied upon, and presumed accurate, any information (or confirmation of the absence thereof) provided by Multinet Gas and/or from other sources. Except as otherwise stated in the report, Jacobs has not attempted to verify the accuracy or completeness of any such information. If the information is subsequently determined to be false, inaccurate or incomplete then it is possible that our observations and conclusions as expressed in this report may change.

The passage of time, manifestation of latent conditions or impacts of future events may require further examination of the project and subsequent data analysis, and re-evaluation of the data, findings, observations and conclusions expressed in this report. Jacobs has prepared this report in accordance with the usual care and thoroughness of the consulting profession, for the sole purpose described above and by reference to applicable standards, guidelines, procedures and practices at the date of issue of this report. For the reasons outlined above, however, no other warranty or guarantee, whether expressed or implied, is made as to the data, observations and findings expressed in this report, to the extent permitted by law.

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1. Introduction

1.1 General

Multinet Gas (“MG”) is the principal gas distribution service provider in the inner and outer east of Melbourne, Yarra Ranges and South Gippsland regions of Victoria (Figure 1). MG’s network includes 164 km of transmission pressure pipelines and 9,866 km of distribution mains¹.

Figure 1 MG distribution area (MG website)



As a regulated entity, MG is required to propose revisions to its Gas Access Arrangement Review (GAAR) for consideration by the Australian Energy Regulator (“AER”) on a five year cycle. MG’s next revision covers the period 2018 to 2022.

¹ Source: <https://www.Multinetgas.com.au/our-vision-values/>

Jacobs Group (Australia) Pty Ltd (Jacobs) has been engaged by MG to provide a review of MG's capex governance policies and practices. The two aspects of the National Gas Rules ("NGR") which form the focus of the Review are:

- The selection of projects for execution must be appropriate and in accordance with the requirements of the rules, and
- The execution of projects must be efficient (particularly as to cost) and must achieve the outcomes that comprised the project justification.

This report considers the processes associated with the operative assets of MG².

The arrangement of this report is:

- Section 2 – Provides a brief summary of the review scope
- Section 3 – Introduces the requirements under Rules 74 & 79
- Section 4 – Provides the review of MG governance principles and documentation
- Section 5 – Provides the review of MG governance structure and processes
- Section 6 – Compares MG governance with industry standards
- Section 7 – Provides guidance on possible approaches of the regulator relevant for the MG review

1.2 Context

The National Gas Rules (NGR)³ requires that MG's Access Arrangement Information (AAI) includes capex incurred in the previous regulatory period and a forecast of capex in the coming regulatory period (Rule 72):

- *Capex (by asset class) over the earlier Access Arrangement period, being 2013 to 2017 (Rule 72(1)(a)(i))*
- *A forecast of the capex over the period 2018 to 2022 and the basis of the forecast (Rule 72(1)(c)(i)).*

Table 1 shows the capex forecast included within the AAI of the current regulatory period finishing in 2017:

Table 1 Multinet Gas capex forecast in current Access Arrangement Information⁴

Category	2013	2014	2015	2016	2017	Total 2013–17
Mains replacement	12.6	3.6	12.3	22.6	5.7	56.7
Residential connections	12.8	14.5	14.4	14.0	14.1	69.8
Commercial/industrial connections	1.3	1.3	1.3	1.3	1.3	6.6
Meters	3.4	2.5	2.4	1.8	2.1	12.2
Augmentation	7.0	5.6	5.2	5.5	0.4	23.7
IT	28.1	6.4	4.2	5.3	1.6	45.7
SCADA	0.8	0.1	0.0	0.0	0.0	1.1

² Other systems such as IT appear to use different systems

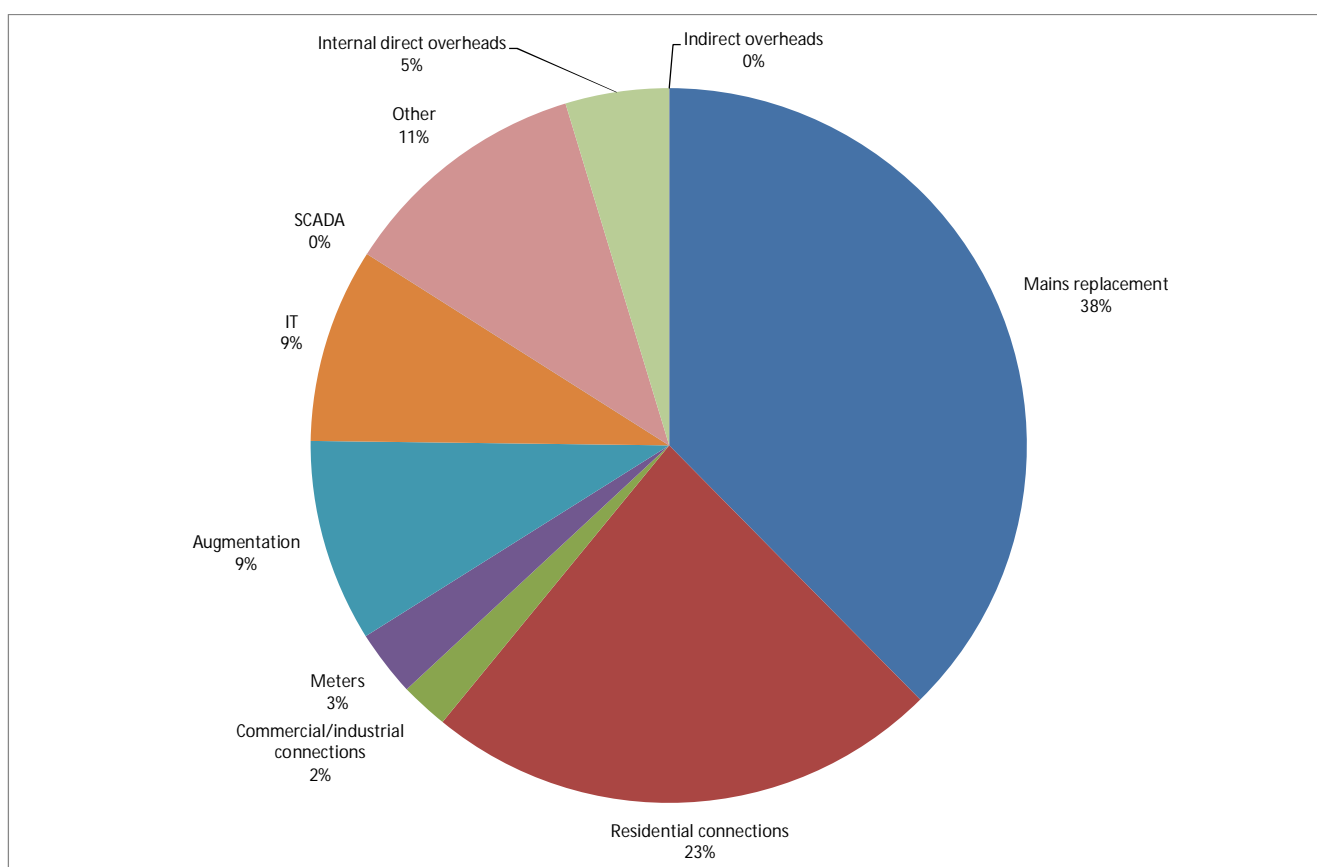
³ The version current at the time of this proposal is Version 29

⁴ AER amended decision - Multinet access arrangement information - 8 October 2013

Category	2013	2014	2015	2016	2017	Total 2013–17
Other	15.3	4.9	3.4	6.8	4.3	34.7
Internal direct overheads	1.4	2.8	2.8	2.8	2.9	12.7
Indirect overheads	0.0	0.0	0.0	0.0	0.0	0.0
GROSS TOTAL	82.8	41.7	46.1	60.2	32.4	263.2
Customer contributions	11.6	4.3	1.6	1.6	1.6	20.7
Government contributions	0.0	0.0	0.0	0.0	0.0	0.0
NET TOTAL	71.2	37.4	44.5	58.6	30.8	242.5

The proportions for the 2016 year are shown in Figure 2. The most significant categories of capex are the mains replacement program and Customer Initiated Connections (CIC).

Figure 2 2016 forecast capex from Multinet Gas AAI



Robust, clear and accountable capex governance arrangements are considered key to demonstrating that MG's investment over the AA period is effectively prioritised, efficient and prudent as well as ensuring that capex forecasts are efficient and prudent.

2. Approach

2.1 Scope

MG has engaged Jacobs to undertake a review of its capex governance policies and practices, including:

- Reviewing and providing an opinion on the adequacy and suitability of MG's structures, processes, policies and procedures governing its decision making in relation to capex, including for identifying and managing mid-project changes, as a means of ensuring and demonstrating the prudence and efficiency of capex that will be subject to assessment by the AER in accordance with Rules 74 and 79 set out above; and
- Recommending any changes or improvements to the structures, processes, policies and procedures.

MG has made its staff and key documentation available to Jacobs to enable it to undertake this review.

2.2 Exclusions

The scope of work does not include reviews of:

- Unit cost methods or application
- Methods of project cost calculations
- Demand or volume market forecast methods
- Underlying investment plans

The review is not an audit of the MG capex accounts, nor of conformance of specific projects to the NGR or MG system requirements.

2.3 Material reviewed

Key documents and project example materials reviewed are listed in Appendix A.

2.4 Key personnel interviews

Jacobs conducted a series of interviews with MG staff (Table 2). Information gathered from these meetings illustrated and evidenced the operation of the governance systems.

Table 2 - Interviews

Session	Date	MG Attendees
Regulatory and Finance	5/9/16	Stephanie McDougall (Price Review Manager) and Matt McKenzie (Group Financial Controller)
Project Delivery	14/9/16	Michelle Wingrave (Large Capital Works Manager (Gas))
Asset Management	14/9/16	Mark Beech (General Manager Gas Network)
Capital Investment Review Board	14/9/16	Craig Savage (General Manager Asset Management)

Session	Date	MG Attendees
Major Projects	27/9/16	John Koutsoukos (Senior Engineer Network Planning) and Mark Cooper (Gas Asset Manager)
I.T.	10/10/16	Paul Le Feuvre (Consultant)

3. Requirements of Rules 74 and 79

3.1 Capex forecasts and estimates

NGR Rule 74 provides the requirements for all forecasts and estimates included as part of the proposed AA. Forecasts relevant for this Review are forecast of future unit costs to apply during the term of the proposed AA. Estimates relevant for this Review are capital cost estimates.

74 Forecasts and estimates

- (1) Information in the nature of a forecast or estimate must be supported by a statement of the basis of the forecast or estimate.
- (2) A forecast or estimate:
 - must be arrived at on a reasonable basis; and
 - must represent the best forecast or estimate possible in the circumstances.

3.2 New capital expenditure criteria

The NGR sets out the criteria under which capital expenditure may be classified as 'conforming capital'. The criteria for conforming capital are provided under rule 79 of the NGR as follows:

79 New capital expenditure criteria

- (3) Conforming capital expenditure is capital expenditure that conforms with the following criteria:
- (a) the capital expenditure must be such as would be incurred by a prudent service provider acting efficiently, in accordance with accepted good industry practice, to achieve the lowest sustainable cost of providing services;
 - (b) the capital expenditure must be justifiable on a ground stated in subrule (2).
- (4) Capital expenditure is justifiable if:
- (a) the overall economic value of the expenditure is positive; or
 - (b) the present value of the expected incremental revenue to be generated as a result of the expenditure exceeds the present value of the capital expenditure; or
 - (c) the capital expenditure is necessary:
 - (i) to maintain and improve the safety of services; or
 - (ii) to maintain the integrity of services; or
 - (iii) to comply with a regulatory obligation or requirement; or
 - (iv) to maintain the service provider's capacity to meet levels of demand for services existing at the time the capital expenditure is incurred (as distinct from projected demand that is dependent on an expansion of pipeline capacity); or
 - (v) the capital expenditure is an aggregate amount divisible into 2 parts, one referable to incremental services and the other referable to a purpose referred to in paragraph (c), and the former is justifiable under paragraph (b) and the latter under paragraph (c).

Table 3 provides the summary requirements of Rule 79. Conforming capital must meet the efficiency requirement in item 1 as well as one of the necessity requirements in items 2 through 6.

Table 3 - Conforming Capital Summary Requirements

Item	Requirement	Clause	
1	• Prudency & Efficiency	79 (1)	Must be met
2	• Value	79 (2)(a)	Must be justified on one or more of these grounds
3	• Revenue	79 (2)(b)	
4	• Safety	79 (2)(c)(i)	
5	• Service Integrity	79 (2)(c)(ii)	
6	• Regulatory	79 (2)(c)(iii)	
7	• Existing Demand	79 (2)(c)(iv)	

3.3 Demonstration of efficiency

For the purposes of the Review, particular emphasis is based on the efficiency requirements of Rule 79 (1):

“..capital expenditure must be such as would be incurred by a prudent service provider acting efficiently, in accordance with accepted good industry practice, to achieve the lowest sustainable cost of providing services.”

Demonstration by MG of the existence of, and adherence to, suitable decision making processes and asset management processes provides evidence supporting MG's prudence, efficiency, and adherence to good industry practice in its capital expenditure.

4. Governance principles and documentation

4.1 Governance of project management

The concept of governance in general is a reflection of activities that are most easily identified with governments in that governance occurs at a high level, whether in relation to countries, corporations, or projects. Mark Bevir, professor of political science at the University of California defines governance as:

“all processes of governing, whether undertaken by a government, market or network, whether over a family, tribe, formal or informal organisation or territory and whether through laws, norms, power or language.”⁵

Emphasis on corporate governance practices has become more prevalent during the past 15 years in part as a response to the Asian Financial Crisis of the late 1990's and the more recent Global Financial Crisis. Principles for corporate governance centre on transparency, recognition and inclusive treatment of a greater number of stakeholders, protection of shareholder rights, and ethical behaviour, particularly at the board level, but also within the corporation where activities may be subject to compromise such as procurement or project selection.

Corporations generally are becoming more advance in the use of formal project management methodologies. PRINCE2 and Project Management Institute (PMI) project management systems provide fully developed approaches to project management and PRINCE2 provides guidance on project governance. It is noted that MG contract personnel have recently completed PMI project management training.

It should be recognised that MG management activities have only recently been reintroduced to the organisation after previously being outsourced along with project delivery. Since that reintroduction (circa 2012), MG has steadily been putting in place more advanced governance and project management systems in parallel with the overall organisation's electricity network operations (ie with UE). Jacobs observed during this review that MG is employing an appropriate level of governance given the complexity and duration of the projects.

4.2 MG governance principles and processes

The following project governance principles are applied by MG:

- The governance process is scalable and adaptable, depending on the risks, complexity, and strategic importance and projects are monitored for changes to these characteristics as they progress.
- Projects are staged (where appropriate) and focus on the right issues at the right time.
- The process is inclusive in that regular reviews are attended by an appropriate selection of discipline representatives.
- Projects tend to be modest in scale given the modest demand growth on the MG network and MG's conservative approach, when compared to some other Australian gas network owners, in the replacement of cast iron mains is noted.
- MG is diligent in its pursuit of continuous improvement and the review of completed projects, particularly for those which deviate on price or scheduling, is a standard practice.

The governance processes adopted are incorporated in the organisational structures and processes described in this report. Over-arching processes are:

- The Gas Access Arrangement Review (GAAR) and its associated planning and preparation processes

⁵ Bevir, Mark. *Governance: A very short introduction*, p

- The Asset Management Plan (AMP) for the gas network which establishes a long-term plan developed in detail in the five years corresponding to the GAAR period, and
- Annual budgeting and approval processes undertaken and reviewed by management, Board and shareholders

4.2.1 Scalable and adaptable

MG's delegation of financial approval levels is well-scaled to MG's project sizes with separate levels applicable to projects:

- Board - over \$10M
- CEO (and with recommendations from CIRB) - up to \$10M
- General Manager level - up to \$2M
- Nominated asset management and service delivery staff - up to \$100k

At the present time the operating project governance structure is two-tier, largely based around structures for larger projects (refer Section 5.1.5) and structures for smaller projects (Section 5.1.5).

The requirement on the scalability and adaptability for MG is more limited than in some other Australian gas networks. Projects tend to be less than \$10m and have common characteristics. Within that requirement, MG's governance approach is scalable and adaptable. For instance it would not be scalable without further development to a \$100M phased project with various decision points. The MG approach is appropriate for their requirements and in the event that a large scale project or highly complex project is required in the future, it will be necessary for MG to implement an appropriate project-specific governance system as part of that project.

Conclusion

MG's governance system is appropriately scalable and adaptable to cover all the types of projects expected to be delivered in the foreseeable term.

4.2.2 Staged

MG does not employ a typical multi-staged approvals process for all projects such as those used by some larger Australian network utilities that frequently deliver more complex, longer term projects. Due to low demand growth in the network and with no major expansion underway or planned, works are limited to typical compliance, safety, and connection services. These projects are not demanding of a more elaborate gated system of approvals and the cost and burden of further gating is not considered justified.

Projects are identified in the Asset Management group where, in accordance with regulatory requirements, alternative projects are considered as part of a project business case. Approval for each project is provided in accordance with the delegations of financial authority and the project is passed to Service Delivery where a detailed costing is generated in collaboration with the contracted service providers and using independent estimators where necessary. Once the costs are approved in accordance with the delegations of financial authority the project is passed to the contracted service provider for delivery.

For larger projects, a form of gating was observed although not to the level as would be necessary or appropriate for large complex projects with a high level of costs in the pre-implementation stage. The form of staging for the larger projects observed appeared in the separate cost estimation and scoping processes prior to project commitment. This structure is for non-standard works, which occur occasionally such as city-gate regulator stations etc. These typically involve preliminary engineering work (by third party expert/consultant or D&C) which provides the opportunity to re-assess design and impacts and future budgetary needs before commitment.

Conclusion

While staging is more limited in MG's governance system than may be the case for some larger utility networks, the approach is appropriate for the type of work, in terms of complexity and duration, carried out by MG.

4.2.3 Inclusive

Inclusiveness within the governance process was discussed frequently during client interviews. In fact, much of the governance process seems to have evolved as a result of the recognition of the importance of inclusion as part of project oversight.

Recommendation

While inclusion requirements are being met at MG, there should be better documentation in this area – formal list of roles, meeting processes, and decision processes. These seem to be understood at MG and in development, but as they are not yet fully documented they are subject to greater risk from personnel changes or organisational changes. Jacobs understands that a project management methodology is currently being developed and has been approved for use by United Energy. MG intend to use the UE work to implement a similar system.

4.2.4 Aligned

For MG, alignment with corporate objectives is relatively straightforward. The MG network is at a mature stage of development with demand being constant or declining in most of the licensed area. With the high efficiency of electric appliances now available, including heating, and the relatively high cost of expanding gas services, the network is not expected to undergo major constraint related works in the medium term. Most work carried out is to meet basic licensing obligations.

Major works for MG are (i) meter replacement in accordance with compliance requirements, (ii) long term cast iron replacement being carried out at a measured pace compared to MG's peers, (iii) connections, and (iv) requested services. These are consistent with corporate requirements of compliance, safety, and customer service.

Conclusion

The projects undertaken by MG are driven by obligations under its licencing as much as by larger corporate strategic objectives. As such, compliance works are aligned with standard corporate objectives.

4.2.5 Continuous improvement

MG has an active continuous improvements process that is standard practice in both the Monthly Governance Committee and in the CIRB. MG is evolving from an earlier business structure involving complete outsourcing of asset management. Other than the actual project delivery process, the asset management processes are now managed in-house and MG's systems are evolving to-suit.

MG has a governance structure for large capital projects that has been finalised (Gas Capital Works Steering Committee Charter (July 2015)). MG has also indicated it is progressing towards ISO55000 asset management practices.

MG has the benefit of being associated with the larger and more mature United Energy business and benefit from systems developed in UE being subsequently available for use in MG.

Continuous improvement is an industry best practices goal for project governance and is considered a key aspect of project work at MG. This was evident in the review provided. However the documentation setting out the review process is limited and should be improved/further developed. MG have indicated that a joint innovation committee has been established with one of its contracted service provider and another is being established with the other contracted service provider in October 2016.

4.3 Documentation

Documentation is a key area for improvement in MG's project governance. It is important to note that the documentation for project governance need not be overly capacious. The nature of the projects undertaken by MG, or any organisation for that matter, requires only documentation that is commensurate with the work. In MG's case, most documentation mentioned in this review can be limited to only a few clear pages.

Specific documents reviewed, including procedures and policy documents and examples of reports and business cases used by MG, are identified in Appendix A.

4.4 Governance recommendations

- It is recommended that MG enhance the linkages to the Rule 79(2) criteria by noting the categorisation(s) justifying the capex explicitly within the approval documentation.
- Documentation should be further developed to formalise what MG appear to already apply in practice. This includes, for example, simple project performance matrices, role descriptions, and compliance checks on 79(2).
- Enhance reporting by the project manager to the governance structure on non-financial project management measures (time, quality, delivery of objective, personnel, safety, etc) as well as for financial metrics. This could be by exception (and could include "traffic light" colouring for rapid evaluation). The reporting categories, which should be selected by the project governance structure should be explicitly listed in the reports.
- As a corollary of the above, enhanced reporting by the project manager would facilitate the Project Governance Meeting minutes to be clearer to readers who were not attendees and hence improve the documentary record.

5. Governance structures and processes

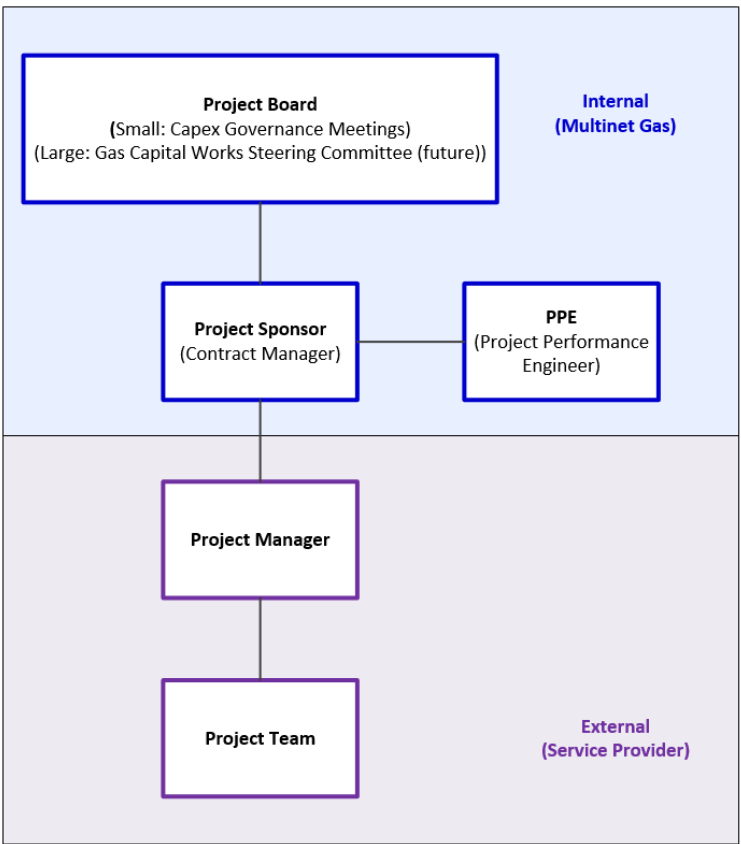
5.1 Summary governance arrangements of capital projects

5.1.1 General

In the project development stages prior to implementation, projects are put forward by the asset management group. Projects of any materiality have a business case which is owned by the asset management group. Approval of business cases is based on the Delegation of (financial) Authorities (DOA) levels within MG. The development of larger business cases is supported by the service delivery team which arranges for a pricing proposal from the service contractor to inform the business case.

Jacobs' interpretation of the project governance arrangements in the project execution stage are summarised in Figure 3. Note that in this figure the Project Board is the label given to project governance entity overseeing the project. Multinet Gas has a specific body identified as the Project Board (described in Section 5.1.3) that has operated during the current regulatory period and which establishes the governance requirements of projects undertaken by UE and MG.

Figure 3 Governance arrangements in the project execution stage



A summary of the structures applied is provided below:

5.1.2 Capital Investment Review Board (CIRB)

The CIRB is a standing committee established under a charter.

The CIRB reviews and endorses business cases above \$2M, making a recommendation to the CEO (who has the approval authority to \$10M) or the Board. The CIRB also considers non business-as-usual and higher risk projects. Although the CIRB will also consider selected post-implementation reviews of completed projects regularly to assess benefits achieved, the CIRB does not have an ongoing governance role during the project execution stage.

The CIRB has executive (CEO and CFO) and general manager level representation across asset management and ownership areas. The CIRB covers UE as well as MG.

5.1.3 Project Board

A Projects Board has operated within the current regulatory period covering both UE and MG. The Project Board is established under a charter dated 2013.

The Projects Board has governance oversight for all projects within UE & MG including:

- Business projects and initiatives
- Information technology (IT) projects
- Network Asset projects

The Projects Board determines the level of oversight required for each project as part of its governance process. This includes acting as a project's governance body until the appropriate governance structure is determined such as a project specific steering committee.

The Projects Board has CEO and General Manager level representation.

Jacobs anticipates that the development of further bodies such as the Gas Capital Works Steering Committee (Section 5.1.4) provides further focus for the steering committee function that is scale-specific leaving the Project Board to establish and govern the framework rather than specific projects.

5.1.4 Major Capital Projects

Gas Capital Works Steering Committee (GCWSC) Charter has been implemented.

The Steering Committee will monitor all projects which fit into the following criteria

- High public profile
- High risk to the business
- Projects over \$1M
- As determined on a case by case basis

Representation is at GM level.

Separate steering committees are applied for specific projects at present, examples noted include:

- Hightett Asset Relocation Project
- Warburton Reticulation Project

The GCWSC is the logical governance successor to the CIRB in the implementation phase of large projects. Given that the governance process in the absence of the GCWSC or a project specific steering committee is the UE/MG Projects Board which is at CEO level, or the Monthly Governance Meeting, which is at a lower level, Jacobs expects that the GCWSC will complete the suite of appropriate governance structures for the different project sizes undertaken by MG.

5.1.5 Monthly Project Governance meetings

All projects not under a specific steering committee's governance falls under the Monthly Project Governance Meetings.

The Monthly Project Governance meeting is a standing meeting for each of the two contracted service providers, and is made up of the following senior contractor and MG staff:

- Service Provider (Chair)
- Asset Management representative
- Asset Strategy representative
- Service Delivery representative

Meetings are minuted however the minutes are highly condensed and would not be informative to non-attendees. As noted elsewhere, Jacobs recommends that more reporting be made by the contracted service provider on non-financial performance indicators.

5.2 Project management

Project management is undertaken by the contracted service provider. This includes cost, time, attaining the outcomes specified in the scope of work and in-the-field stakeholder management.

The MG service delivery structure, represented by the Contract Manager, appears to take the role of project sponsor during the execution phase. The Contract Manager is supported by technical leads, or Project Performance Engineers (PPEs) in the delivery phase.

The following points are not clear from the documents reviewed:

- The responsibility for selecting a project sponsor
- The governance applied prior to nomination of the sponsor as part of the business case
- The accountability and reporting requirements of the project sponsor
- The specifics of program management arrangements (eg meter verification and replacement program)

5.3 Project completion

MG has a documented process of sign-offs at handover of projects back to the business and undertakes Post Implementation reviews on major projects that have been completed.

5.4 Operational and Management Services Agreement (OMSA)

The two OMSAs, with Comdain and ZNX, are the primary implements for the execution of capex (and other operational aspects) by MG. The current OMSA⁶ extends to 30 June 2018 with MG having an option for a three year extension.

The OMSA classifies projects as being costed (principally) under either a schedule of rates, a single party price with validation against an independent estimator's estimate or two-party tendered works.

⁶ Jacobs has sighted to ZNX OMSA as listed in Appendix A and understands that the Comdain OMSA is similar.

In addition to the project management function to be undertaken by the service provider for capex under the OMSA, the service provider is responsible for:

- Required consents
- Occupational Health and Safety and Environmental Management as the principal contractor

The service provider will perform the services with the intent that it will achieve the performance targets and KPIs specified or called up from time to time by MG.

The KPIs include (Table 4):

Table 4 KPIs under the ZNX OMSA

Network Performance	USAIFI
	Excessive Interruptions
Distribution customer satisfaction	Response Times
	Customer Complaints
	Customer Satisfaction Index
Compliance	OHSE index
Service Delivery	Multinet Satisfaction Index

The OMSA includes a governance framework for the purposes of:

- reviewing the alignment of the Service Provider's service provision with the Customer's Objectives and business performance;*
- participating in forums in which the parties can review Service delivery performance, effectiveness and efficiency;*
- ensuring the Customer and the Service Provider fulfil their respective commitments under this Agreement including commercial, process and administration requirements;*
- monitoring and managing achievement by the Service Provider of financial performance and non-financial outcomes;*
- maintaining a focus on cost reduction, business alignment, responsiveness and quality improvement in the provision of the Services;*
- facilitating decision-making under this Agreement; and*
- fostering cooperation by participating in joint forums and engaging in open communication, transparency and collaboration*

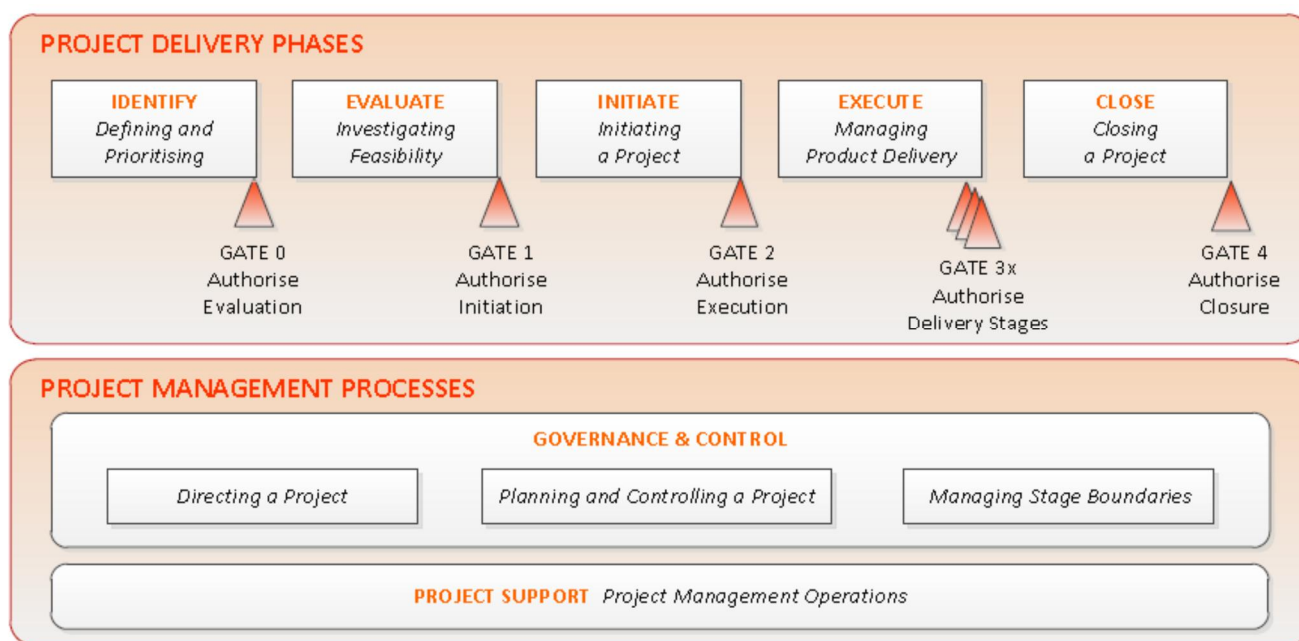
The governance framework includes a Governance Team with representatives from both parties overseeing a Management Team responsible for implementing the decisions and directions of the Governance Team. The Management Team also includes representatives from both parties.

5.5 IT projects

IT projects within MG are governed by the same framework as applies for UE. Many IT functions are shared with UE.

The framework is mature and gated for larger projects - Figure 4.

Figure 4 UE and MG IT project framework⁷



As noted in the Project Delivery Framework Overview:

The UE and MG IT Project Delivery Framework (IT PDF) is being developed to establish standards and guidelines for the management of programmes and projects within UE and MG IT.

The IT PDF is consistent with UK Government Cabinet Office Best Management Practice disciplines relating to portfolio, programme and project management, including Management of Portfolios (MOP®), Managing Successful Programmes (MSP®), Managing Successful Projects with PRINCE2®, and Portfolio, Programme and Project Offices (P3O®) frameworks. Note: The Best Management Practice disciplines are considered to be supportive of the ISACA COBIT® framework objectives.

At the time of development of the IT capex budgets for the GAAR, workshops are undertaken with the MG business for a seven year outlook and subjected to internal IT reviews. Overview business cases are prepared that are either a Project Overview (≈1 page) if the project justification is obvious or a Project Justification (≈10-20pp) with high-level costings and linked to the NGR. Subsequently (during the regulatory period) IT projects are subjected to a full business case process before commitment.

Execution of IT projects is substantially outsourced.

The IT group includes an architecture group to receive and review initiative briefs. An Architecture Review Board reviews the proposed solution. Execution is supervised by a Project Management Office and/or a Change Control Board depending on size. An IT Executive Forum provides the highest level of approvals (subject to the DOA) for IT projects.

⁷ Project Delivery Framework Overview

5.6 Other

Multinet Gas' capex is monitored by the Financial Control Governance Committee (joint UE and MG), reported in the CFO report (reported to Board and shareholders) and the shareholder briefings. The reporting at this level includes key financial metrics against budgets, percent completion (major projects), pipeworks (km versus GAAR projection), notable issues on major projects as well as HSE reporting.

6. Comparison to Industry Standards

6.1 Association of Project Management

6.1.1 APM introduction

The Association of Project Management (APM) is a United Kingdom based organisation founded in 1972 and has over 20,000 members and 500 corporate members. Its purpose is the development and promotion of project and program management. APM claims to be the largest professional body of its kind in Europe.

The APM governance special interest group has produced a governance guide call *Directing Change: A Guide to Governance of Project Management* which focuses on four main components of the governance of project management⁸:

- Portfolio direction
- Project Sponsorship
- Project management effectiveness and efficiency
- Disclosure and reporting

A key difference in the APM approach and that followed by most organisations, including MG, is that in the APM approach, overall responsibility of project governance is placed with the company Board. The purpose is to have all projects as a whole evaluated against an organisation's objectives and constraints and for the Board to be responsible for ensuring this. The Board has the responsibility for developing the project portfolio direction and for the project sponsors. This Board level responsibility parallels the Board's overall responsibility for corporate governance.

Delegation of the Board's responsibilities for project governance, and the reporting requirements back to the Board, should be explicit. The process for this is apparent but is not clearly documented from lower levels through to the Board briefing. Only the financial performance indicator is highly visible in the lower level governance documentation such as the Monthly Project Governance Meeting minutes that were sighted by Jacobs.

As discussed in Section 4.2.4, the risk of misalignment between projects and corporate objectives is considered limited due to the nature of MG projects being primarily compliance, safety, and connection services. It is difficult for projects to be misaligned when they are limited to those activities required under licencing or other legal requirements.

⁸ In the APM guide, the term 'project management' is inclusive of the management of programs of projects.

6.1.2 APM principles and comparison

Table 5 provides a comparison of MG project governance with APM governance of project management principles.

Table 5 - Comparison with APM governance principles for project management

APM Principles	MG (Documentation)	Comments and Recommendations
The Board has overall responsibility for governance of project management.	The Board has direct financial approval for projects over \$10M. The Board also approves the annual budgets including capex. The status of major projects and programs and of capex spend against budgets is reported to the Board and shareholders.	Note the CIRB Charter states “The CIRB endorsement is not a substitute for the formal Delegations of Authority or requirements of the Board to approve individual business cases (as they see fit).” Jacobs’ believes the MG situation does not require strict adherence to this principle given that “projects” to MG are not one offs.

APM Principles	MG (Documentation)	Comments and Recommendations
<p>The organisation differentiates between the projects and non-project based activities</p>	<p>The Service Delivery arrangements are separated from the asset management functions in MG.</p>	<p>There is a clear understanding, based on interviews, of whether network activities are considered projects or are managed as general works.</p> <p>The project governance meetings are held on a monthly basis with the service providers and are attended by the relevant contract manager and representatives from gas networks, being independent to the operations side of the business.</p> <p>It is noted that the service contractors undertaking the capex delivery also undertake the maintenance work on the asset however in the context of MG's activities this intermingling is not considered an issue.</p> <p>Capex categories are as follows: Asset replacement (reactive, must do immediately), metering (non-discretionary), pipe replacement program (managed at program level, will be first to lose funding), performance capital (small projects), demand capital (based on change in network load, part of capital growth plan).</p>

APM Principles	MG (Documentation)	Comments and Recommendations
<p>Roles and responsibilities for the governance of project management are clearly defined.</p>	<p>Project management responsibility rests clearly with the service contractor. Sponsorship and governance roles are separated and provided by clear entities within MG.</p>	<p>The regularity of the work lends itself to the structure MG use. The GCWSC meets on a monthly basis. The Committee includes: GM Service Delivery, GM Gas Networks, GM Service Delivery North, Large Capital Works Manager. Responsible to monitor all projects >\$1M, high risk profile/business or selected case-by-case.</p> <p>A Project Management Methodology is currently under development through UE and the MG version will be an adaptation to this. Project Governance Meetings are held monthly with service providers.</p> <p>The outputs (minutes) of the GCWSC and Project Governance Meetings should be enhanced to be consistent with the reporting that occurs through to Board and Shareholder level.</p> <p>It is noted that the organisational structure is currently in transition and roles and responsibilities will evolve and be re-defined as MG moves forward.</p> <p>RECOMMENDATION: It is recommended that the GCWSC charter and Project Governance Meeting arrangements are expanded and further developed to formalise reporting lines through to Board level on all relevant KPIs. More detail should be provided in lower level reports, with higher level reporting being progressively more summarised or by exception or based on scale or risk levels</p>

APM Principles	MG (Documentation)	Comments and Recommendations
Disciplined governance arrangements, supported by appropriate methods, resources and controls, are applied throughout the project lifecycle.	Project Close Out Checklist, Post Implementation Review	<p>The process is considered good.</p> <p>The Project Close Out Checklist appears to capture all of the necessary checks and balances. Signatures on the form include the Service Provider Project Manager, MG Project Performance Engineer, MG Asset Management. The check list is not signed by the contracts manager⁹ who assumes overall responsibility for the delivery of projects.</p> <p>Post implementation reviews are carried out by the service provider and attended by MG (Contract Manager, PPE, Asset Manager / Gas Networks and others as required (eg HSE)) if the project meets a certain criteria which during interviews it was indicated that this included >10% over budget, >1month late or as required by MG (highly technical, once-off type project etc.).</p> <p>RECOMMENDATION: The MG procedure for whether a post implementation review is undertaken is still in draft, this should be finalised and implemented. Jacobs understands that this is pending a review of UE processes to provide consistency across the group.</p>

⁹ Large Capital Works Manager under the structure in-place when the particular audit noted was completed

APM Principles	MG (Documentation)	Comments and Recommendations
Every project has a sponsor	Yes. Although this is based on our interpretation rather than an explicitly assigned role.	<p>Sponsors are dedicated roles due to the size of the organisation.</p> <p>The project sponsor is essentially the Large Capital Works Manager (Contract Performance Manager under the new MG structure) who is the person in MG who is responsible for overseeing delivery of the project. It is noted however that the business case owner sits within the gas networks side of the business, who are represented on the relevant project governance entity.</p>
There is a demonstrably coherent and supporting relationship between the overall business strategy and the project portfolio	<p>Yes - this appears to be driven by the nature of the business.</p> <p>'Investment Management Policy': The Board approves capital expenditure, which is allocated to following categories: Asset replacement, metering, pipework's asset replacement, non-network, customer initiated, performance capital, demand, pipework's capacity expansion.</p> <p>'Asset Management Plan' (AMP): The AMP relates the project portfolio to the overall management of the asset</p>	<p>The 'Investment Management Policy' is more of a procedural policy document and does not set out guidelines for setting the strategy or matching capital expenditure against this strategy.</p> <p>It is difficult to demonstrate cohesion between the business strategy and the project portfolio given the nature of the MG business in that MG manages a regulated asset and Jacobs would not expect further in MG's case.</p> <p>It is noted that the AMP is based on a 5 year outlook (although it is increased to 7 years to cover the next regulatory cycle to match the duration of the cycle).</p>

APM Principles	MG (Documentation)	Comments and Recommendations
All projects have an approved plan containing authorisation points at which the business case, inclusive of cost, benefits and risk is reviewed. Decisions made at authorisation points are recorded and communicated.	Jacobs understands this is correct but haven't yet reviewed any of the business cases. Projects (except customer raised projects) have a business plan that is developed by Gas Networks; which contains option assessment and costing and optimisation. e.g. 2013 / 2014 MG Business Case Carrum Pipeworks Replacement (PWR) via LP to HP Upgrading.	There is no 'gate' type process implemented for project implementation, but this is considered unnecessary given the size and nature of the projects undertaken by MG. The monthly Project Governance Meeting's, which are attended by the Service Providers and project board, provides the opportunity to review project progress and issues that may affect the business case.
Members of delegated authorisation bodies have sufficient representation, competence, authority and resources to enable them to make appropriate decisions.	This appears to be correct. For example: "Delegation of Authority Policy", Schedule 1, Table 'Initiating Projects and Expenditure Commitment Matrix' details authority levels for approvals for projects.	Delegation of authority is provided at various levels based on project value (although table provides CEO authority up to \$10M. For projects >\$10M (rare) these are for Board approval. This structure seems logical and within each levels 'competence' given the nature of projects are generally core business type activities.
The project business cases are supported by relevant and realistic information that provides a reliable basis for making authorisation decisions.	The business case requirements include all elements of project review to demonstrate efficiency and prudence in proposed business cases. Project description and purpose is documented, options are reviewed, financial estimates are provided to suitable accuracy, risk assessment is summarised, and project schedule is provided e.g. 2013 / 2014 MG Business Case Carrum Pipeworks Replacement (PWR) via LP to HP Upgrading	Project business case contains option assessment (where multiple options may be practical) or at least a comparison against "do-nothing", costings and NPV assessment. Justification relating to risk, and re-fix and relight opex cost seem light and has high impact on final result of assessment.

APM Principles	MG (Documentation)	Comments and Recommendations
The board or its delegated agents decide when independent scrutiny of projects and project management systems is required and implement such assurance accordingly.	<p>This is confirmed, for example in:</p> <ul style="list-style-type: none"> CIRB charter: scope is projects in excess of \$2M, although only a few projects fall into this category Project Board Charter 	<p>The Projects Board includes the CEO and General Managers and establishes what governance arrangements are required for projects within UE and MG.</p> <p>The formal communication process to board level (and shareholders) includes a monthly report.</p> <p>The minutes for the Project Governance Meetings contain actions for the Project Manager or others of the Project steering committee.</p>
There are clearly defined criteria for reporting the project status and for the escalation of risks and issues to the levels required by the organisation.	<p>The project manager is responsible for monitoring risk and notifying the sponsor of any changes to risk profile. The sponsor and Project Governance Meeting (for projects in general) are responsible for proactively monitoring risks and issues as they arise.</p> <p>MG has a charter for the GCWSC which provides a graduated structure with higher level direct engagement for higher risk projects.</p>	<p>Project Governance Meeting: Agenda includes review of previous month, what's coming up next month, issues. During interview process, it was indicated that the full project list is reviewed and discussions around project issues are held by exception.</p> <p>This meeting is attended by the Project Sponsor, members of the project board (eg Gas Networks) and a delegated PM from the service providers company. Flags are raised to the relevant parties outside of the project (i.e. Gas Networks will be informed of any impacts from project activities on the network).</p> <p>The minutes from the meeting are brief with the main points documented, but they do not appear suitable for escalation due to the level of detail (ie no detail as to why actions have been unchanged for months).</p> <p>RECOMMENDATION: Enhance reporting criteria to explicitly report on non-financial items, by exception.</p> <p>RECOMMENDATION: Improved level of detail in Project Governance Meeting minutes.</p>

APM Principles	MG (Documentation)	Comments and Recommendations
The organization fosters a culture of improvement and of frank internal disclosure of project management information.	<p>The work of continuous improvement was a theme repeated several times during client interviews. A closeout report is produced for each project and some projects are reviewed through a “lessons learned” session, where time or budget was exceeded.</p> <p>The post implementation review viewed by Jacobs (Springvale Rd Rail Crossing) has been through four revisions and appears to be a fulsome and self-critical document.</p>	<p>MG work on a cross-business basis with United Energy, utilising similarities in their respective business methodologies and procedures. Several examples were made during the interviews of procedures that are under development at United Energy, which will be adapted for MG use when complete. Multiple procedures at MG are also currently in draft form with finalisation planned in the short term.</p> <p>RECOMMENDATION: As indicated elsewhere, this documentation should be finalised and implemented.</p>
Project stakeholders are engaged at a level that is commensurate with their importance to the organisation and in a manner that fosters trust.	Allowance is made for a stakeholder management during project initiation and endorse by the project sponsor and, if applicable, the steering committee. MG includes stakeholders in monthly review committees. However, client commitment to stakeholder engagement was clear during client interviews	Fully consistent
Projects are closed when they are no longer justified as part of the organisation’s portfolio.	<p>Projects have a clear close out process (with the completion of a project close out checklist). The ‘Change to Statement of Works’ form is utilised to capture and change (when >10%) which and the continued business justification is tested at this stage.</p> <p>The ‘Delegation of authority policy’ states that the approver of a variation must have delegated authority for the full contract amount, including all variations.</p>	<p>Fully consistent</p> <p>The process for re-evaluation due to latent conditions discovered at a site depends on the scale of the latent condition. Small scale latent conditions are re-evaluated by the service provider at site while larger scale latent conditions are raised to the project sponsor for re-evaluation.</p>

6.2 *Project Governance by Ross Garland*

6.2.1 *Introduction to Project Governance*

The book, *Project Governance: A Practical Guide to Effective Project Decision Making*, by Ross Garland, identifies 4 principles of effective project governance. These are:

- Ensure a single point of accountability for the success of the project. This ensures clarity of leadership, plus clarity and timeliness of decision making.
- Service delivery ownership determines project ownership. This places the business at the heart of project delivery and ensures the project governance framework maintains a service delivery focus.
- Ensure separation of stakeholder management and project decision-making activities. This will prevent decision-making forums from becoming clogged with stakeholders, which would result in laboured on ineffective decision making.
- Ensure separation of project governance and organisational governance structures. This will reduce the number of project decision layers, since the project decision path will not follow the organisational line of command. Confusing them results in organisational role accountabilities sitting uneasily alongside project governance accountability needs.

These principles are to apply to the governance of a particular project as opposed to the APM principles which apply to the governance of project management for all projects in the organisation. Section 6.1 compared the governance described in the Guidelines with the APM principles as a measure of governance of project management provided. In this section, *Project Governance* principles are compared with the level of project governance that should result from application of the Guidelines.

6.2.2 Comparison to *Project Governance* principles

<i>Project Governance</i> Principles	MG Guidelines	Comments and Recommendations
Ensure a single point of accountability for the success of the project.	The service provider is accountable for project outcomes.	Service provider structures and processes have not been reviewed.
Service delivery ownership determines project ownership.	Project ownership begins with Gas Networks (as part of Networks and Pipelines) and transfers to Service Delivery	While the governance approach provided in the Guidelines is not consistent with the <i>Project Governance</i> principles, it is considered to be suited to the MG business and utility business generally. Contract Management is an in-house project management/governance specialist who holds the service delivery aspect of projects and Gas Networks (asset management) is well placed to provide project origination and early development.

Project Governance Principles	MG Guidelines	Comments and Recommendations
Ensure separation of stakeholder management and project decision-making activities.	While recognising the importance of stakeholder management and providing for a formal Stakeholder Management Plan where required, decisions are made separately. Gas Networks maintain a position on the steering committee.	<p>Fully consistent</p> <p>Stakeholders tend to be managed at project level, which is suitable given the typical size of projects and MG's business. Management of stakeholders depends upon the size of projects and type of job.</p> <p>Customer complaints are generally handled by the CRC team or via a Dissatisfied Customer Service Order via the retailer, which are usually managed directly with the Service Provider, with escalation to the Contract Manager if necessary.</p> <p>Third party works >\$100k will be via a member of the Contract Manager's team (MG) who are listed on the contract.</p> <p>Network initiated projects are via the CRC team which are managed directly with the service provider in the first instance and escalated to the Contract Manager if required.</p> <p>The relevant legislative requirements for notification of works are followed.</p>
Ensure separation of project governance and organisational governance structures.	This principle addresses the need to have project decision making self-contained within the project management and project governance structures without reliance on the organisational structure or decision making policies.	Fully consistent.

7. Assessment in the regulatory context

Governance structures and processes should generally be aimed at supporting business objectives of prudent, cost efficient and reasonable investments. Jacobs expect that the regulator will be assessing investment proposals against these objectives and it is therefore expected that the AER will examine whether Multinet's governance structure and processes support the business in achieving these objectives.

For clarity the objectives can be defined as follows:

Prudency

- That the need for capital and operating expenditures is thoroughly investigated, clearly defined, justified and documented, and that evidence of the need for the project, including all reference material that demonstrates the need are well documented and available.

Cost Efficiency

- That all feasible investment options have been identified and analysed and that the least cost option has been selected. To this extend an appraisal process should be in place to allow for consistency and transparency in approach.

Reasonableness

- That the project cost is in keeping with market conditions, accurate (to the level of engineering completed), capable of verification, and variations to previous plans is explained. The costing of individual projects and programs are transparent, capable of verification and replication, and internally consistent with the business costing method.

Typical questions the Regulator may consider in assessing MG's governance regime as it relates to projects and programs are provided below. These questions have been developed while working on a number of recent assignments in support of Electricity and Water Utility submissions.

7.1 Prudency

Is there a sound planning and forecasting process for deriving total capital and operating expenditure forecasts based on realistic growth and demand assumptions:

- Is there a clearly defined planning process and criteria (investment triggers) for system and non-system investments
- Does the planning process provide for a clear documentation and justification of the need of proposed investments, including all reference material that demonstrates the need
- Is there a clear governance link to the costing process providing for appropriate reviews, approvals and authorisations
- Is there evidence and can it be demonstrated that these planning and governance processes are being implemented.
- Are key outcomes from previous investments identified and assessed against the original objectives

7.2 Cost Efficiency

Is there a sound investment appraisal process that is based on cost-benefit analysis and does not require a level of analysis that is disproportionate to the scale and likely impact of each of the credible options? Is the process able to be applied in a predictable, transparent and consistent manner?

- Has the investment appraisal process and method been explained and documented

- Does the appraisal process require identification and assessment of reasonable investment scenarios
- Does the appraisal process provide guidance on the number and type of scenarios to be considered
- Does the appraisal process provide a cost-benefit analysis method(s) to be applied
- Does the appraisal process require the selection of the least cost credible option that maximises net present value
- Does the appraisal process require clear documentation providing evidence that all feasible options that have been identified and analysed and that the least cost option has been selected
- Is there a clear governance link to the planning process providing for appropriate reviews, approvals and authorisations
- Is there evidence and can it be demonstrated that the investment appraisal process and method is being implemented.
- Are benefits from previous investments determined and quantified (where possible)

7.3 Reasonableness

Is the costing method sound and has it been based on a logical, consistent and estimating system.

- Is the costing of projects and programs transparent, capable of verification and replication, and internally consistent with costing method
- Is there a clear governance link to the planning and costing process providing for appropriate reviews, approvals and authorisations
- Is there evidence and can it be demonstrated that the cost method is being implemented.

7.4 Governance support for AER assessment

The following table provides the Jacobs view on whether MG's governance structure and processes provides support for the AER assessment of prudence, efficiency, and reasonableness as set out above.

Table 6 - Governance Support of AER Assessment

Area	Requirement	Supported
Prudency	Clearly defined planning process and criteria (investment triggers) for system and non-system investments	<p>An example business case was noted: 2013 / 2014 MG Business Case Carrum Pipeworks Replacement (PWR) via LP to HP Upgrading.</p> <p>Asset replacement, metering and customer initiated projects are all non-discretionary projects.</p> <p>The pipe replacement program is a 30 year program that was assessed and optimised, as detailed in the business case.</p> <p>Performance capital projects are small projects and spend is monitored on a monthly basis and all are subject to a business case.</p> <p>Demand capital expenditure is subject to network modelling, which identifies projects to be placed into the annual capital growth plan.</p> <p>IT projects have a planning and approval framework</p>
	Planning process provides for a clear documentation and justification of the need of proposed investments, including all reference material that demonstrates the need	An example business case was noted: 2013 / 2014 MG Business Case Carrum Pipeworks Replacement (PWR) via LP to HP Upgrading.
	Clear governance link to the costing process providing for appropriate reviews, approvals and authorisations	Experience gained from repeated similar projects is applied in the costing process. An independent estimate is also sought when a competitive price is not procured. The delegation of authority clearly outlines the authority for approval on a financial basis.
	Evidence and ability to demonstrate that planning and governance processes are being implemented.	Evidence sighted.
	Key outcomes from previous investments identified and assessed against the original objectives	This has been sighted in the post implementation review. Not all projects undergo this review, only ones over budget (>10%), technically interested or as requested by MG.
Cost Efficiency	Investment appraisal process and method are explained and documented	Some aspects in the costing (e.g. risk) can significantly affect the NPV analysis, but source of the numbers applied are not sufficiently detailed for a third party to review their adequacy. This should be better documented.
	Appraisal process requires identification and assessment of reasonable investment scenarios	The analysis in the Pipeworks Strategy and AMP support this
	Appraisal process provides guidance on the number and type of scenarios to be considered	NIEIR econometric modelling for different economic growth rate scenarios is described in the AMP. Given the limited augex expected for MG further extensive scenario based modelling would not be anticipated

Area	Requirement	Supported
	Appraisal process provides a cost-benefit analysis method(s) to be applied	Yes, NPV analysis is applied.
	Appraisal process requires the selection of the least cost credible option that maximises net present value	Yes. The source of some of the cost parameters are not clearly defined (such as risk adjustments), while they may significantly influence the result.
	Appraisal process requires clear documentation providing evidence that all feasible options that have been identified and analysed and that the least cost option has been selected	An example business case was noted: 2013 / 2014 MG Business Case Carrum Pipeworks Replacement (PWR) via LP to HP Upgrading. This was evaluated against a "do nothing" option. In general Jacobs would not expect a large number of project alternatives would exist in MG's circumstances
	Clear governance link to the planning process providing for appropriate reviews, approvals and authorisations	Projects originate in planning and asset management A significant portion of the business involves reactive/non-discretionary type of activities. Jacobs understands that demand capital projects are based on network modelling and forecasting.
	Evidence and ability to demonstrate that the investment appraisal process and method is being implemented	Yes, based on the business case example provided
	Benefits from previous investments determined and quantified (where possible)	MG undertakes post-implementation reviews. Example sighted
Reasonableness	Is the costing of projects and programs transparent, capable of verification and replication, and internally consistent with costing method	Cost estimates provided by contractors or by contractor and independent estimator provides transparency. MG does not always follow this principle (eg Rod Laver SOW evaluation). MG advise that in this case the project was customer initiated and in many cases the customer's timetable does not have time for tendering or the independent estimator. Some of the costings in business case, e.g. risk adjustments, could be more transparent. RECOMMENDATION: MG's processes should be clear where it is considered acceptable to only use a single price in the evaluation
	Is there a clear governance link to the planning and costing process providing for appropriate reviews, approvals and authorisations	Business case for LP and HP Upgrading is signed by planning engineer, gas asset manager, GM Gas Operations and CEO.
	Can it be demonstrated that the cost method is being implemented	Yes, NPV assessment provided in appendices of business case.

7.5 AER assessment summary

Based on Jacobs experience with recent AER reviews, MG's capital projects governance regime as it is applied today provides a level of oversight consistent with the requirements of rules 74 and 79, although the documentation of the decision process for the selection of projects does not specifically reference the rules.

RECOMMENDATION: It is recommended that a specific test against Rules 74 and 79 of the NGR is included in the project selection process, where the specific criterion within the rules that is attributed to the selection of each project is clearly identified.

Appendix A. Documents reviewed

Jacobs has been provided access to a number of governance documents including the following:

Area	Title	File name
Capital Investment Review Board		
	Agenda_CIRB Meetingg_27Jul 2016	01_Agenda_CIRB Mtg_27Jul.pdf
	Action Items CIRB Meeting_29 Jun 2016	02_Action Items_CIRB Mtg_29Jun.pdf
	Lower Templestowe to Doncaster Item 2A + Grid CIRB Presentation	1. Lower Templestowe to Doncaster Item 2A + Grid CIRB Presentation.pdf
	Balwyn Nth Clean Up Item 2B CIRB Presentation	2. Balwyn Nth Clean Up Item 2B CIRB Presentation.pdf
	Attachment 2.5 Electricity Networks - June16	Attachment 2.5 Electricity Networks - June16.pdf
	Gas Capital Works Steering Committee Charter (draft)	Capital Works Charter (3).docx
	CIRB_Charter_January_2016	CIRB_Charter_January_2016_Signed.pdf
	Information Pack -CIRB Mtg_27Jul 2016	Pack_CIRB Mtg_27Jul.pdf
Gas networks		
	Delegation of Authority Policy	DOA-003-POL - Delegation of Authority Policy.pdf
	Carrum Pipeworks Replacement	MG 13-028 Carrum Pipeworks Replacement.pdf
	Network Capital Expenditure Approval Policy	MG-PL-0009 Network Capital Expenditure Approval Policy.pdf
	Pipeworks Strategy 2014/15-2018/19	MG-SP-0016 Pipeworks Strategy 201415-201819.pdf
	ZNX OMSA 3 August 2012	OMSA - final - 3 August 2012.doc
Service delivery		
	Project Governance Meeting August 2016	Project Governance Meeting 201608.docx
	Rod Laver Arena SOW	Rod Laver Arena SOW MG Signed.pdf
	Rod Laver SOW Evaluation	Rod Laver SOW Evaluation Signed.pdf
	ZNX Pipeworks Weekly Progress Report - 2016 08 19	ZNX Pipeworks Weekly Progress Report - 2016 08 19.docx
	15-16 Pipeworks Resources Graph - 2016 08 05	15-16 Pipeworks Resources Graph - 2016 08 05.pdf
	Cost Forecast Variation - 2016 07	Cost Forecast Variation - 2016 07.pdf
	LCW Monthly Reporting - ZNX July 2016	LCW Monthly Reporting - ZNX July 2016.xlsx
	MG Projects Status July 2016	MG Projects Status July 2016.pdf
	Project Governance Mtg 27 Agenda - 2016 08 15	Project Governance Mtg 27 Agenda - 2016 08 15.docx
	ZNX Projects - 2016 08 15	ZNX Projects - 2016 08 15.pdf

Area	Title	File name
Service delivery – Project governance meetings		
	15-109 - Athol St & Alfred St Prahran - MG Project Close Out Checklist	15-109 - Athol St & Alfred St Prahran - MG Project Close Out Checklist
	Capital Works Charter	Capital Works Charter (3)
	CSOW 16-047-002 Modem Upgrade South	CSOW 16-047-002 Modem Upgrade South
	Project Governance Meeting	Project Governance Meeting 201608
	RSOW 17-023 Performance (SCADA Control Lorimer Street)	RSOW 17-023 Performance (SCADA Control Lorimer Street)
	Springvale Rd PIR	Springvale Rd PIR_final signed
IT		
	ACCB Charter	ACCB Charter
	Business Case Template	Business Case Template
	IT Initiative Brief - GeoServer	IT Initiative Brief - GeoServer V_2 FINAL APPROVED VERSION
	IT Strategy and Architecture Reference Board Charter	IT Strategy and Architecture Reference Board Charter draft v02.2
	IT08 - Mobility Integration	IT08 - Mobility Integration
	IT19 - GIS Refresh	IT19 - GIS Refresh
	Project Delivery Framework	Project Delivery Framework Overview
	UE and MG Executive Forum Charter	UE and MG Executive Forum Charter V2 0
Other		
	MG CFO Report	MG CFO Report - August 2016
	Financial Control Governance Committee - Oct 2015	Financial Control Governance Committee - Oct 2015 V2
	Multinet Gas Network Asset Management Plan 2014/15- 2018/19	MG-PL-0005 MG AMP 2014-15 Final
	Comdain Capability Assessment	06 Comdain Capability Assessment April 2016
	GT Agenda	GT Agenda 130516
	MG Comdain Apr 16 Dashboard	MG Comdain Apr 16 Dashboard
	Gas LCW SC Agenda & Minutes	150728 Gas LCW SC Agenda & Minutes
	Gas LCW SC Agenda Minutes Michelle 4Oct2016	150728 Gas LCW SC Agenda Minutes Michelle 4Oct2016
	MG Shareholder briefing pack. August 2016	MG Shareholder briefing pack. August 2016
	Finance - register of policies and procedures	Finance - register of policies and procedures
	Small Capex Procedure	ACC-072-PRO Small Capex Procedure
	Fixed Asset Policy	FAM-023-POL - Fixed Asset Policy MG
	Investment Management Procedure	ACC-073-PRO Investment Management Procedure

Area	Title	File name
	Organisation Chart	Organisation Chart - 05092016
	16-122 Balwyn North - Mont Albert Part 1 Tender Evaluation	16-122 Balwyn North - Mont Albert Part 1 Tender Evaluation
	16-122 Balwyn North - Mont Albert Part 1 Tender Evaluation	16-122 Balwyn North - Mont Albert Part 1 Tender Evaluation