

---

**Project Name: Infrastructure Refresh - Data Protection – IT22**

**Description:** Multinet Gas data protection capability is based on a leading NetBackup solution utilising a combination of disk and tape backup media. The backup solution was refreshed in 2016. However from 2016 until 2021 the amount of data needing to be protected is expected to grow and by 2021 the capacity will need to be increased and the underpinning platforms will need to be refreshed.

The work undertaken in 2016 well overdue with the platform capacity at breaking point and unable to cope with the volume of data. Some backup jobs were not completing in the designated window and having to be rescheduled. This was not a satisfactory state and support staff had to rerun and closely manage each backup job.

To avoid a repeat of this position, an uplift of platform and capacity and an upgrade of data protection software will be required in 2021.

The software product used is Symantec Netbackup 7.7. which is currently a supported version. An update will be required in 2021 to maintain currency in accordance with MG's "IT Asset Management Policy v2.0". Also the underlying hardware will need to be refreshed to a current supported level in line with the policy.

---

**Strategic Alignment:** Data Protection or backups are critical to maintaining computer systems and business applications. It is essential to maintain recoverability of systems in the event of loss, failure or disaster.

It is essential that the systems providing data protection are maintained at levels that ensure reliable service and reliable data recovery. Data protection supports the following strategic objectives:

- Maintain systems to industry standard to reduce risk of disruption to customers and retain levels of efficiency
- Ensure ongoing performance, resilience and safety of the distribution network
- Ensure readiness to achieve regulatory requirements

Services to customers can only be maintained if the company can continue to operate irrespective of individual system failures or in a disaster situation. Data protection supports this capability, ensuring that the company can continue to deliver services to customers under most circumstances. The capital expenditure for this project is justified as it is:

- Prudent and efficient in line with accepted good industry practice: and
- Necessary to maintain the integrity and safety of MG's services.

---

**Options:** Three options have been considered for maintaining the currency of the Data Protection systems.

**1. Do Nothing**

Data capacity will increase over the next 5 years and the data protection platforms will need to be upgraded to cope with the increase.

The current data protection environment is based heavily on mechanical devices such as tape drives and spinning disks. Mechanical devices are engineered to perform for a given period. When the life of the device is exceeded, failures are increasingly likely. Failures can also be gradual and unnoticed, for example a tape drive at the end of its operational life may write tapes at the limit of formatting tolerances so that the ability to read the tape becomes unreliable.

## 2. Refresh Data Protection Platform

This is the preferred option. The following equipment would be reviewed and refreshed:

- tape libraries and tape drives
- uplift media servers and catalogue servers
- uplift capacity for the data protection platforms
- upgrade data protection software to supported versions

## 3. Adopt Cloud Services

This option uses cloud services for long term retention of backup data. Short term backups would still be retained locally to ensure timely restoration of critical systems. This option would dispense the need for tape drives and for tape handling and storage. Data security and privacy associated with this option would still need to be assessed. Also the volume of data being backed up and the costs associated may result in costs higher than those for the existing platform and may be a key deciding factor.

At the time of undertaking the refresh of the data protection platform, cloud services will be considered and a detailed evaluation will be conducted. With cloud services in the marketplace going through considerable change, it is not possible today to definitively state that they will be a cost effective solution.

<b>Rationale:</b>	<p>There are two main reasons for this initiative:</p> <ul style="list-style-type: none"><li>• Reduce risk by ensuring that backup systems are running on fully supported and reliable platforms.</li><li>• Cost avoidance of extended support fees by maintaining platforms within supported versions.</li></ul>
<b>Timing:</b>	Q1 – Q2 2021
<b>Cost:</b>	<p>\$1.01M for new infrastructure and project and deployment costs.</p> <p>No impact on ongoing IT operating cost is expected.</p>