Introduction

This document describes the non-functional features and attributes that Gas Industry Co requires of the registry operator.

This document is part of the registry operator service provider agreement, and must be read in conjunction with that **agreement**, including the associated schedule 3 – registry operator **functional specification**.

Nothing in document permits or requires the **Provider** to act in a manner that is inconsistent with the **Provider's** obligations under the **Act**, the **Rules**, the **agreement** or any applicable law.

1   Application architecture

1.1   Industry standard

The **system** must be built on an industry standard, robust architecture that is resilient and scalable in the following areas:

   a. **infrastructure**;

   b. operating system;

   c. network topology;

   d. application software;

   e. database;

   f. systems deployment and management;

   g. external security, firewalls, virus protection, web application firewall (WAF) etc.

1.2   Independent environments

There must be separate and independent environments for development, user acceptance testing and production. Independence means that activity on the user acceptance testing and development environments must not affect the production environment in any way. The **Provider** must ensure that the **user** acceptance testing environment is available for **users** to perform their own testing and staff training.

1.3   Scalability

The **system** must be easily scalable to accommodate for growth in **users** and transactions, from those at the commencement date, without significantly affecting performance and reliability.

   a. Retailer access - 100% growth

   b. Distributor access - 100% growth

   c. Meter Owner access – 100% growth

   d. GIEP Exchange access – 500% growth

   e. Non participant access – 100% growth

   f. Web services access – 500% growth

   g. Concurrent user sessions – 100% growth

1.4   Upgrades and updates

The **Provider** and Gas Industry Co must agree procedures and capability for the implementation of upgrades and updates to the **system**. All upgrades and updates must be

carefully planned, scheduled, notified to Gas Industry Co and **users** well in advance and implemented efficiently at times that cause minimum disruption to **users**. The timetable for the implementation of all upgrades and updates must be approved by Gas Industry Co. The **Provider** must implement all available, proven operating system, database and **system software** upgrades that are relevant in a timely manner.

1.5 Data integrity maintenance

The **Provider** will be responsible for the maintenance of the database and must ensure that functionality is available within the application to reload corrected **data** if available and found within a reasonable period. The **Provider** must provide assistance to **users** in executing any such recovery.

The **Provider** must undertake the recovery of any database integrity and corruption issues and correct any errors that occur as a result of the **system** incorrectly processing any information.

Where possible, the **Provider** must ensure that the **system** provides a mechanism for validation checks to prevent **users** from being able to load inaccurate **data**.

2 Websites, email addresses and branding

2.1 Logo

External communication with **users** and the public related to the **services** must include Gas Industry Co's approved logo, in a position on that communication type agreed with Gas Industry Co. This includes but is not limited to websites, templates for notices and **documentation** but excludes emails.

2.2 Website and email addresses

Website and generic email addresses relating to the **services** (except personal email addresses for the **Provider's** staff) are the property of Gas Industry Co. Where those addresses, including email addresses, use the **Provider's** registered domain, the **Provider** must cease using those addresses immediately if the **agreement** is terminated or expires.

For 12 months immediately after the **agreement** is terminated or expires or during the performance of any disengagement services as defined in clause 13 of the **agreement**, whichever is the later, the **Provider** will forward any emails to the email address specified by Gas Industry Co and will post a message on the website directing viewers to a website address specified by Gas Industry Co.

3   Interoperability

3.1   Interfaces

The **Provider** must ensure that the following types of interface are provided:

a. a secure web browser **user**-interface for updating, viewing, and downloading information in CSV formatted files. Supported browsers must include currently supported versions from time to time of Internet Explorer, Microsoft Edge, Google Chrome and Firefox. The web server must support TLS 1.2 as a minimum;

b. a facility to transfer flat files (CSV) via either FTP or SFTP, to handle multiple and/or batch updates and for requesting and downloading reports; and

c. web services using SOAP for downloading the current information in any field within the **registry**, notwithstanding that the actual fields available for download at any time are set out in the **functional specification**.

The **Provider** must ensure that the registry also provides any other interfaces that are specified in the **functional specification**.

3.2   Extended System Interfaces

a. The **Provider** must ensure that all inbound and outbound interfaces to the **system** must be efficient and secure and as documented in the **functional specification**. The **Provider** may offer additional alternative interfaces if it wishes.

b. The **Provider** must document all interfaces in the **functional specification** including source, target, format, mechanism and frequency.

4   Service level requirements

4.1   Continuous service

The **Provider** operates the gas **registry** which is the "database of record" for information on points of connection that have installation control points (ICPs). It must be available to **users** 24 hours daily and 7 days per week.

4.2   Service levels reported monthly

The **Provider** must provide Gas Industry Co with a monthly report in accordance with section 21 of this Schedule) detailing service levels attained during the month and where a requirement was not attained, the reasons for any failure. The service levels are outlined in the following Table 1.

Table 1:   Service levels reported monthly

Measurement	Requirement	Report
Extended business hours availability [07:00 to 19:30]	>99.5%	% attained
All other hours availability	>98.0%	% attained
Unplanned outages	<1	Actual number
Planned outages	<2	Actual number
Duration of each planned outage	< 2 hours	Actual duration
Planned outages approved by Gas Industry Co	Yes	Achieved or not
Planned outages scheduled outside extended business hours	Yes	Achieved or not
Internal response time for ICP-based query	>95%	% of WebViewICPDetails to complete within 1sec
End user response time for address-based query	>95%	% of WebAddressSearch to complete within 5sec
On demand report delivery	< 4 hours of request during extended business hours [7.00 to 19.30]	Longest time period in seconds
Standard month end report files completed	By 09:00 on 1st **business day** of the relevant month	Actual time/date

4.3 Maintenance

Unless otherwise approved in writing in advance by Gas Industry Co (such approval not to be unreasonably withheld or delayed), the **Provider** must ensure that there is no more than two planned outages per month. The **Provider** must ensure that each planned outage is outside of normal business hours, at a time to be agreed by the **Provider** and Gas Industry Co, and unless the prior approval of Gas Industry Co has been obtained (not to be unreasonably withheld), be no more than 2 hours in duration.

If the **Provider** has obtained Gas Industry Co's approval of a planned outage, that outage does not count against service level targets.

For urgent corrective maintenance (to fix **system** faults that are threatening the service levels set out in this document, and which is deemed to be an unplanned outage), the **Provider** may, having notified Gas Industry Co, make the **system** unavailable in order to undertake maintenance at any time. Any such unavailability will count against service level targets.

Each outage must:

a. For planned outages, be notified to **users** two days in advance, and one hour prior to the outage.

b. For urgent corrective maintenance outages, be notified to **users** one hour prior to the outage.

5   System availability

5.1   Service delineation

Both availability and outage service levels are delineated by the point at which any transaction enters or exits the **system's** subcontracted Internet Services Provider (ISP). All service components, including the **system** host, internal and wide area networks and ISP, are covered under availability and outage calculations. This is shown in Figure 1.

Figure 1:   Service delineation
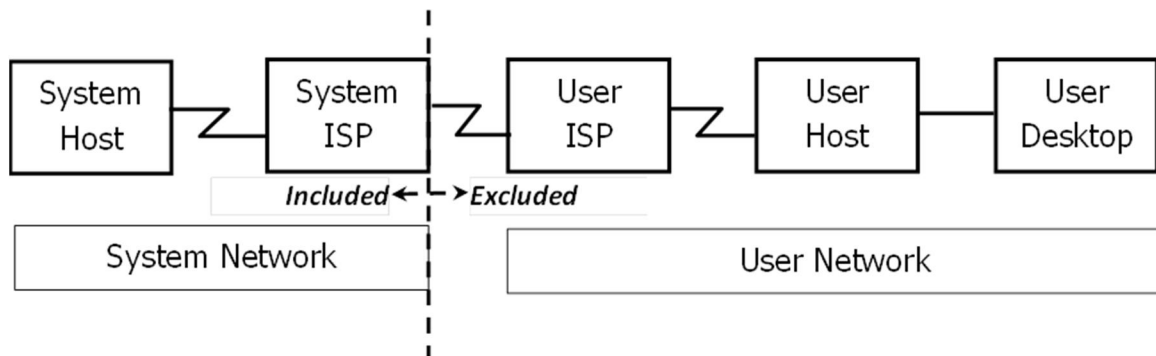
5.2   Calculation of availability

Availability will be calculated based on the number of minutes that the **system** is substantially unavailable in any one month due to failure of any component of the host or ISP, using the following formula:

Availability = 100 – (minutes of unplanned outage and urgent corrective maintenance/ (days in month*minutes of time from the appropriate availability window)*100)

5.3   Categorisation of outages

Unplanned outages and urgent corrective maintenance are included in the calculation of **system** availability.

Planned outages are not included in the calculation of availability.

If the action of any **user** has caused the outage to have occurred, or have contributed in a material fashion to the cause of the outage, then the **Provider** will not be held accountable for the outage. This includes any actions not taken by the **user** at the request of the **Provider** where acting on the recommendation would have avoided or minimised the outage. **User**-caused outages, or the additional outage time caused by a **user** failing to take directed action, will not be included in the calculation of availability.

6   Recoverability and business continuity

6.1   Backup and Restore

A backup copy of both the production and hot standby **software, data** and **processed data** must be taken at least daily and stored in secure offsite locations. The **Provider** must have a plan in place to restore backup **software**, **data** and **processed data.** The plan must be available to Gas Industry Co as part of the documentation. The **Provider** must regularly test the plan and report the results to Gas Industry Co.

6.2   Hot Standby System and Recovery time

The **Provider** must ensure that the BCP includes a disaster recovery plan designed to recover the **system** in the event that the **Provider's** normal site (that contains the production **system**) is inoperable. The **Provider** must ensure that a hot standby disaster recovery **system** is available at least 100km away from the production site to commence the **services** within a period of two hours from failure of the production **system** and must ensure that no more than ten minutes of pre-failure **data** and **processed data** is lost in the event of the primary **system** failing, and must ensure the lost **data** and **processed data** is restored with the cooperation of **users**.

6.3   Disaster recovery testing

The **Provider** must test the disaster recovery plan and disaster recovery **system** every six months. The test must include:

   a.   obtaining the prior written approval from Gas Industry Co for the date and time of a disaster recovery test;

   b.   notification to all **users** of the date and time of the disaster recovery test, and any changes to URLs, addresses etc. for the duration of the test;

   c.   activation of the disaster recovery **system** at the remote location;

   d.   verification of the disaster recovery **system** availability to an external **user**;

   e.   transfer of the production environment to the disaster recovery **system** for a period of at least two **business days** at the date and time agreed under a) above;

   f.   testing of files and **updates**; and

   g.   transfer of the production environment back to the production **system** at the date and time agreed under a) above including notification to all **users** of the date and time of the change back to the production system and any changes to URLs, addresses etc. for the duration of the test;

The **Provider** must provide a written report to Gas Industry Co, in the next monthly report (under section 21 of this Schedule) after completion of the disaster recovery test, of the results and ensuing actions.

At regular intervals, the **Provider** must perform "desk-checks" to test smaller components of the disaster recovery plans.

6.4   Business continuity plan

The **Provider** must keep an up to date a business continuity plan (BCP).

The **Provider** must ensure that the BCP:

a. is aligned with the current version of ISO 22301 or NFPA1600 or another recognised standard for business continuity planning;

b. contains contact details for the **Gas Industry Co** nominated contact person supplied by Gas Industry Co, including backup contacts.

The **Provider** and Gas Industry Co will agree which aspects of the BCP must be subject to testing. The **Provider** must ensure that those aspects of the BCP are regularly tested (at least annually and the results of each test reported to Gas Industry Co in the next monthly report (under section 21 of this document) following the test.

The **Provider** must ensure that, to the extent that the results impact on the **services**, the results of each BCP test are provided to Gas Industry Co before any changes to the BCP relating to the **services** are implemented, and, the **Provider** will consider any feedback provided by Gas Industry Co;

7 Security and confidentiality

7.1 Policies

The **Provider** must comply with Gas Industry Co policies, as updated from time to time, related to information and security where those policies and updates are provided by Gas Industry Co. The policies outline Gas Industry Co's expectations for managing personnel, physical and information security. The **Provider** may provide feedback to Gas Industry Co about the application of those policies. If any new policies or updates to existing policies will result in changes to the **services** or impose material costs on the **Provider**, the **Provider** may initiate the change control process in accordance with clause 7.7 of the **agreement** and Appendix A of this document.

7.2 Application of NZISM

The **Provider** must meet the objectives of the New Zealand Information Security Manual (NZISM) or an equivalent standard, and must use best endeavours to maintain the security of the **system**, **data** and **processed data** against unauthorised access or use.

7.3 Authentication

The **Provider** must ensure that the **system** has a framework for management and authentication of **users** and has the capability to recognise, block and report unauthorised access attempts.

7.4 User access provisions

a. Access restrictions are directed at preventing any action that would compromise the secure, reliable and efficient operation of the **system**. Restrictions on access to the registry, and to **data** within the **system** are set out in the **Rules** and in the **functional specification** or are otherwise determined and published by Gas Industry Co from time to time.

b. The **Provider** must modify access restrictions for any **user** of the **system** in accordance with Gas Industry Co's reasonable instructions issued from time to time.

7.5 Security policy

The **Provider** must ensure that the **system** has a security policy in place and has mechanisms that enforce the password standard, account lock-out for unsuccessful logon attempts and session timeouts. Session timeouts must be set at initially one hour of no use, but must be configurable by the **Provider**. Any subsequent sessions must automatically terminate previous sessions.

7.6   Logs

The **Provider** must ensure that the **system** maintains audit logs of **user** interactions with the **system** and the **Provider** must investigate all alerts of repeated unsuccessful logons to prevent unauthorised access. The audit logs must provide information for **users** to analyse their own usage patterns of the **system**. This information must be made available Gas Industry Co on request.

7.7   Confidentiality

The **Provider** must ensure that all **data** and **processed data** remain confidential to the **Provider**, Gas Industry Co and the **users** that provided the **data** unless the **services**, the **Rules** or the **Compliance Regulations** explicitly require the **Provider** to publish or release the **data** or **processed data**.

7.8   Security and confidentiality incidents

The **Provider** will report security and confidentiality related events to Gas Industry Co and will create a service management event in the service management system according to the Service Management Procedure in section 11 of this document.

8 Capacity

8.1 Capacity planning strategy

The **Provider** must have a well-defined and documented capacity-planning strategy in place to ensure that the **system** always maintains enough capacity for the predicted amount of **data** and **processed data** and processing requirements plus a margin to ensure the service levels (as defined in Table 1) are always met. A detailed capacity review must be conducted at least annually.

8.2 Management utilities

The **Provider** must use system management utilities that will measure the capacity of the **system**, to show trends and therefore assist with predicting future capacity requirements.

8.3 Excess volumes

The **Provider** must promptly advise Gas Industry Co if changes in transactional volumes, **data** volumes, functionality or user behaviour threaten the achievement of service levels. The **Provider** must also investigate the situation and make appropriate recommendations to mitigate the risk to the service levels. Recommendations may include changes to specifications for the **infrastructure** listed in clause 3 of Schedule 1 of this **agreement** or other changes deemed necessary to ensure that the service levels are maintained.

9 Data management

9.1 Data ownership

The rights around use and ownership of **data** and **processed data** are defined in clause 9.7 of the **agreement**.

9.2 History

Unless otherwise agreed with Gas Industry Co, the **Provider** must ensure that all **data** is available for immediate access. As at the **commencement date**, Gas Industry Co agrees to the **Provider** performing regular archiving of **data** that is directly or indirectly received from or provided to **participants** and is older than three months onto DVD storage and then removal from the **system**.

10 Audit trail/traceability

The **Provider** must ensure that the **system** maintains an audit trail of all **data** and **processed data** input, added or changed, confirmations delivered, notifications delivered and the delivery of information to **users**. Audit information must include time, **user**, method and any other pertinent information to allow for full tracking from source to destination.

11 Service management

11.1 Industry standard

The **Provider** must employ best practice, such as ITIL (Information Technology Infrastructure Library), service management including robust quality assurance processes.

11.2 Service management standards

The **Provider** must provide all required service management services including;

   a.   helpdesk and registry administration services;

   b.   software support services; and

   c.   24x7 infrastructure maintenance services

necessary to ensure the **system** functions, operates and performs in accordance with this **agreement** and the **specifications**.

The service management standards are specified in Table 2 and set the minimum standards for fault reporting and restoration of the **services**. As the **Provider** is both performing the **services** and supporting the **system**, the service management standards apply equally for faults reported by internal and external **users** of the **system**.

Table 2:   Service management standards

Severity level of Fault	Definition	Service Level response and response time
1	**Business Critical Failures:** An error in, or failure of, the **system** that: (a) materially impacts the operations of the **services**; (b) prevents necessary work from being done; or (c) disables major or critical functions of the **system**.	**Level 1 Response:** Acknowledgment of receipt of a support request within 15 minutes of the support request. **Level 2 Response:** Appropriately skilled person to respond within 1 hour of the support request. **Level 3 Response:** The **Provider** shall work on the problem continuously and implement a solution within 6 hours of receipt of the support request. If the **Provider** delivers a solution by way of a workaround reasonably acceptable to the **user**, the severity level of the fault shall reduce to a severity level 2 or lower.

2	**System Defect with Workaround:** (a) a critical error in the **system** for which a work- around exists; or (b) a non-critical error in the **system** that affects the operations of the **user** service.	**Level 1 Response:** Acknowledgment of receipt of a support request within 2 hours of the support request. **Level 2 Response:** The **Provider** shall, within 1 **business day** after the Level 1 Response time has elapsed, provide an emergency fix or workaround which allows the **user** to continue to use all functions of the **system** in all material respects. **Level 3 Response:** The **Provider** shall provide a permanent fix as soon as practicable and no later than 20 **business days** after receipt of the support request.
3	**Minor Error:** An isolated or minor error in the **system** that: (a) does not significantly affect **system** functionality; (b) may disable only certain non-essential functions; or (c) does not materially impact the **user's** operation of the **system**.	**Level 1 Response:** Acknowledgment of receipt of the support request within 1 **business day** of the support request. **Level 2 Response:** The **Provider** shall provide a permanent fix within 40 **business days** after the Level 1 Response time has elapsed.
4	**Non-disruptive error** An isolated or minor error in the **system** that has agreement from Gas Industry Co and the **user** that reports the error to leave the fix until the next convenient release	**Level 1 Response:** Acknowledgment of downgrade of severity to level 4 within 1 **business day** of downgrade. **Level 2 Response:** The **Provider** shall provide a permanent fix at the next convenient opportunity as agreed with Gas Industry Co.

11.3   Communication

If a severity level 1 or severity level 2 fault affects more than one **user**, the **Provider** must notify all **users**.

The **Provider** must develop and with assistance from **Gas Industy Co** maintain multiple formal communication channels, such as email, website etc., to promptly notify **users** and the representative of Gas Industry Co of outages and likely timeframes for restoration of **services**.

The **Provider** must provide an escalation process for **users** in the event of either a failure of the **system** extending beyond service level thresholds or in the event of continued **user** service issues.

For faults with a severity level of either 1 or 2, the **Provider** must liaise with the representative of Gas Industry Co and **users** not less than daily, including advising of expected times for the resumption of the **services**.

11.4   Incident reporting

The **Provider** must provide Gas Industry Co with a detailed incident report for any severity level 1 or 2 faults within 3 **business days** of the incident and the total number of faults for the relevant month and whether each fault has been resolved in the monthly report on service levels (under section 21 of this document).

If requested the **Provider** will provide Gas Industry Co access to view (as a minimum) relevant entries on the **Provider's** incident reporting system, and the **Provider's** change and issue register.

12 Technology currency

The **Provider** will ensure all infrastructure hardware is kept current and up to date, and that all infrastructure operating systems and other supporting software are maintained at current supported versions. The **Provider** will ensure that vendor support is in place continuously for all aspects of the **system**.

The Provider will not transition any infrastructure to a cloud based solution (or any non-**Provider** owned solution) without first obtaining Gas Industry Co's approval.

13 Changes to the services or system

13.1   Change control

For changes to the **services** or the **system**, the **Provider** must follow the change control process as set out in Appendix A of this document. The change control process must be integrated into the **Provider's** internal change management processes with respect to the efficient management and reporting of progress.

13.2   Which form of document is used to record a change

All changes to the **services** or **system** must be agreed in writing by the **Provider** and Gas Industry Co, and that agreement will be recorded in either a change request (CR) or a system delivery agreement (SDA). Generally, a CR will be used when the change is of low complexity, low impact or low cost. A CR will be used if:

   a.   the cost of the change is below $250,000; and

   b.   less than 10% of the functionality of the **system** or **services** is being altered; and

   c.   less than 10% of the source code of the **software** is being altered; and

   d.   there is low probability of the scope or the charge to Gas Industry Co changing as the project progresses; and

   e.   the change is not a material part of a major Gas Industry Co policy implementation; and

   f.   a formal warranty period is not required; and

   g.   there is no material impact on the **users** to implement the change in their systems.

These are general guidelines and the **Provider** and Gas Industry Co may agree to use a CR if these thresholds are exceeded. However, the **Provider** and Gas Industry Co must give explicit consideration to using a SDA, and if a CR is used, the reasons for doing so must be recorded in the CR.

The **Provider** and Gas Industry Co may agree to use a SDA for changes below these thresholds.

13.3   Industry standard

The **Provider** must employ industry standard software engineering practices including robust quality assurance processes. Any methodology must cover the whole system development lifecycle (SDLC) in the development and maintenance of **software**.

13.4   Flexibility

The **software** must be designed for flexibility to ensure changes to functions, as a result of **user** or Gas Industry Co requests and **Rule** changes, can be made efficiently and cost effectively. The **system** must have a modular design which allows changes to specific business processes to be

isolated to those areas only with minimal impact on other parts of the **system** or external interfaces.

The **Provider** must be able to develop custom reports, both one-off and for regular delivery, on request from Gas Industry Co.

14 Design consultation

At Gas Industry Co's request, the **Provider** must provide input to the design process for proposed changes to the **Rules** to promote efficient design of the **Rules**. This is limited to a high level assessment of proposed changes to the **Rules** as requested by Gas Industry Co, and will require the **Provider** to proactively keep up to date with Gas Industry Co's initiatives.

Consequent changes to the **services** will be dealt with using the change control process, and therefore detailed input will be provided as part of the change control process, and is not required as part of the design consultation.

The **Provider** must respond constructively to Gas Industry Co's requests for input into the design process for proposed changes to the **Rules** by assessing the potential impact and cost and engaging in dialogue to achieve efficient design.

The **Provider** must proactively propose any changes that it perceives will improve efficiency of delivery of the **services**.

15 User liaison

15.1 Operational relationship

The **Provider** is required to maintain close contact with **users** and Gas Industry Co, be proactive, provide advice on future functionality and ensure that the **system** remains responsive, up to date and consistent with the needs of the industry.

The **Provider** will allow reasonable access to the **Provider's** staff and facilities for Gas Industry Co staff to become familiar with the **Provider's services**. This may involve short term secondments, shadowing the **Provider's** staff, including developers and **system** support staff, or spending time and discussing the **services** with the **Provider's** staff while the **services** are being performed.

15.2 User satisfaction survey

The **Provider** is required to develop, have approved by Gas Industry Co, and distribute an annual survey of all **users** that analyses the satisfaction levels with the **services** provided. The results must be consolidated and the report must include the actions the **Provider** proposes to take to resolve any unsatisfactory results. The report must be completed and provided to Gas Industry Co annually, at a time and in a form to be agreed between Gas Industry and the **Provider**.

16 Training

16.1 Industry training

The **Provider** must make available structured industry training beyond basic use of **software**, at the cost of the **user**. The training course will cover:

a. a brief introduction to the **Provider's** role and its place in the 'big picture';

b. a reasonably thorough review of key role processes;

c. an overview of important **user** obligations relevant to each role;

d. introduction to, and basic use of each role's **user** interface;

e. practical hands-on experience in a UAT type environment;

f. how to contact the **Provider's** team both for day to day operational issues and to engage in the development of the **systems**.

16.2 Online training materials

The **Provider** will provide basic training materials online at no cost to the **user**.

17 Documentation

17.1 Required documentation

The **Provider** must develop, maintain and provide as a minimum to Gas Industry Co:

a. an up-to-date **functional specification** against which the **software** comprised in the **system** including input and output interfaces can be audited under the **Rules**, and to assure Gas Industry Co that additional requirements are being provided correctly. The **functional specification** and any subsequent changes are the property of Gas Industry Co;

b. a **user manual** and basic training materials to enable new **users** to configure their systems correctly and access the **system** to the level of detail agreed with Gas Industry Co. The **user manual** and basic training materials must provide sufficient detail for new **users** to locate and use all the relevant functions. The **user manual** must include a troubleshooting guide, frequently asked questions and information on where and how to seek further help;

c. backup procedures describing alternative methods for the submission and delivery of **data** and **processed data** as required by the **Rules**;

d. a business continuity process manual that describes the procedure, possible impacts on **users** and their operations and instructions on what **users** will need to do for business continuity; and

e. sufficient technical documentation for business continuity in case of the loss of key personnel. This must include a design specification that describes how the **system** delivers the functions described in the **functional specification** and operational requirement documents.

f. up to date, technical **documentation** that details the hardware, **infrastructure** and **software** configurations and settings. The purpose of this documentation is to enable Gas Industry Co to set up the **software** on a system with another provider without delay if this **agreement** is lawfully terminated, and to ensure the contestability of the registry operator role at the natural expiry of this **agreement**.

g. business process information that covers all business processes required to perform the **services**, not just **software** based services.

17.2 Access to documentation

a. The **Provider** will ensure that all **documentation** is readily accessible at all times to Gas Industry Co staff. The **Provider** will ensure that Gas Industry Co has soft copies of any **documentation** for its own use. Gas Industry Co will only use the **documentation**, including any copies, in accordance with the requirements of the relevant clauses of this **agreement** and the **Registry Development Agreement**.

b. The **Provider** must annotate any contents of the **documentation** that it considers may allow or facilitate unauthorised access to the **system** if it was released by Gas Industry Co. Gas Industry Co acknowledges that annotated documentation is sensitive and the

security of the system may be vulnerable if Gas Industry Co does not keep the annotated portions of the documentation confidential.

17.3   Software source code

In the event of early termination of this **agreement** by Gas Industry Co, the **Provider** will immediately supply to Gas Industry Co a full copy of the live **system**. The full copy will be in the form of the latest backup of the **system** or other such later backup as may be requested by Gas Industry Co.

18 Third party innovation

18.1 The **Provider** may offer related services to **users** that use the **software**, **system**, **data** or **processed data** ("third party innovation"). The **Provider** must not offer **services** to parties other than registry participants (as defined under the **Rules**) without the prior consent of Gas Industry Co.

18.2 The **Provider** must ensure that any advice it gives or services it offers to **users** as part of third party innovation is, to the extent possible, consistent with enabling the **user** to comply with their obligations under the **Rules**. The **Provider** must advise any recipient of the third party innovation in writing that the responsibility for ensuring compliance with the **Rules** lies with the **user**.

18.3 When offering or providing third party innovation, the **Provider** must contract directly with the **user**. Gas Industry Co will not be liable for any costs associated with providing the third party innovation that the **Provider** may incur and will not be liable for any loss, claim, demand, damage, cost, expense or liability in connection with the third party innovation.

18.4 In providing the third party innovation, the **Provider** must not disclose any **data**, **processed data**, **documentation** or other related information that is not normally available to the **user** that is receiving the third party innovation. The **Provider** may not offer services that result in **data** being reported to the **user** that the **user** could not access through standard reporting. Additionally, the **Provider** must ensure that third party innovation does not adversely impact on service levels.

18.5 Unless paragraph 18.6 applies, all additional functionality that a **user** requests the **Provider** to develop:

   a. may be for the exclusive use of the **user** for a period of no more than six months;

   b. must be available for all **users** to use, once any exclusivity period ends;

   c. must follow the change control process in clause 7 of the **agreement** and Appendix A and be documented in the **functional specification**;

   d. is part of the **software**, **system** and/or **documentation** as appropriate.

18.6 Any additional functionality that a **user** requests the **Provider** to develop and is for the continued exclusive use of the **user**:

   a. is external to the **services** and the **system**, and will not be recorded in the **functional specification** or included in Gas Industry Co's **software** audits;

   b. must not detract from **system** performance or negatively impact any other **user's** use of, or access to, the **system**;

c. will not be considered in any subsequent changes made by Gas Industry Co to the **services** or the **system**.

18.7   If any additional functionality developed by the **Provider** for exclusive use by a **user** requires modification or testing as a result of a Gas Industry Co requested change to the **services**, the **Provider** must ensure that such modification and testing must not negatively impact the delivery of Gas Industry Co requested changes to the **services** nor cause increased cost to Gas Industry Co.

18.8   If the **Provider**, identifies, or becomes aware of, any issue or defect with the **system**, or if a **user** requests any **system** enhancements, the **Provider** must pass that information on to Gas Industry Co. Gas Industry Co will prioritise any issue, defect or enhancement in the same way as it does others coming from any **user**.

18.9   When developing additional functionality for a **user**, the **Provider** is responsible for making the **user** aware of the impact of paragraphs 18.5 to 18.8.

19 Performance management

19.1 Performance standards

The **Provider** must meet the **performance standards** captured in this document in the following places:

Function	Performance Standard(s)
System availability, reliability and responsiveness	As set out in Table 1
Service management and fault resolution	As set out in Table 2
Recoverability and business continuity	As set out in paragraphs 6.1 to 6.4
Reporting	As set out in paragraph 21

19.2 Performance review

As set out in the **Rules**:

a. at the start of each **financial year**, Gas Industry Co and the **Provider** must agree on a set of **performance standards** against which the **Provider's** actual performance must be reported and measured at the end of the **financial year**;

b. the **Provider** must conduct, on a monthly basis, a self-review of its performance in accordance with rule 18 of the **Rules**;

c. at the end of each **financial year**, Gas Industry Co may review the performance of the **Provider** in accordance with rule 20 of the **Rules**.

Timing for performance management components

Activity	When
Establish goals	Annually in August
Establish measurement system	Annually in August
Self-assessment and Gas Industry Co review	Monthly meetings
Formal review and recognition	Annually in July or August

20 Provider contacts

The **Provider** will advise Gas Industry Co of all changes in operational and management personnel used to provide the **services**, including contact details for new personnel. The **Provider** will provide to Gas Industry Co, and keep up to date, the **Provider's** most current organisational structure for personnel used to provide the **services**.

21 Monthly report

The **Provider** will provide a monthly report by the 10th **business day** of each month, reporting on the activities for the previous calendar month. The monthly report will be published by Gas Industry Co, should not include specific reference to any **users**, and will contain:

a. the report on service levels as specified in paragraph 4.2;

b. confirmation that the backup requirements in paragraph 6.1 have been met or if not, the reasons for not meeting them;

c. details of any BCP or disaster recovery testing performed;

d. details of any security breaches and attempts at breaching the security of the **system**;

e. measure of the **system** capacity and utilisation of that capacity;

f. a summary of all service management incidents and their resolutions;

g. a summary report of the status of all change requests and SDAs;

h. breaches of the **Rules** or this **agreement** made by the **Provider** or **users** (not identified individual **users**);

i. events that may highlight an area where a change to the **Rules** may need to be considered;

j. any other matters reasonably required by Gas Industry Co.

22 Meetings

22.1 Monthly operational meeting

Operational representatives from the **Provider** and Gas Industry Co will schedule to meet monthly, either in person or via teleconference. The monthly meeting maybe cancelled by agreement. Alternates may attend in place of unavailable representatives, but those alternates must familiarise themselves with the discussion topics prior to the meeting. The purpose of these meetings is to build and maintain an excellent working relationship between the operational teams. Standing agenda items will include:

   a. review any current issues and reported faults and bugs;

   b. review any open change requests;

   c. update and inform the operational teams of progress on any projects managed outside the operational teams;

   d. discuss any items of interest from the monthly report;

   e. discuss progress on any actions resulting from an audit of the **Provider**

22.2 Project meeting

For any significant change requests, developments or implementation projects, the **Provider** and Gas Industry Co may agree to meet at regular intervals. The frequency, scope and required representatives for project meetings will be determined at the time, by mutual agreement.

22.3 Annual meeting

Representatives from the **Provider** and Gas Industry Co will meet annually to:

   a. review the previous year's performance;

   b. set any new or changed **performance standards**;

   c. discuss the planned number of hours, project programme and project priorities for the upgrade and improvement services;

   d. discuss technology currency and vendor support arrangements;

   e. review the **Provider's** plan for **Provider** funded enhancements, **system** maintenance and infrastructure lifecycle maintenance;

22.4 Combining meetings from different roles

The Provider and Gas Industry Co may agree to combine the above meetings with similar meetings for any other role that the **Provider** performs for Gas Industry Co.

Change Control Process

Appendix A

Change proposal raised by
Registry Operator (RO) or
Gas Industry Co (GIC)

Initial phase

GIC and RO discuss → RO provides indicative costs

Yes

GIC decision:
Is proposal worthy of further investigation? — No → End or park

Yes

Further Investigation

Does investigation involve considerable work by RO? — Yes → Agree separate CR for RO to fund investigation

No

RO to identify what the change requires, e.g.
- hardware/software requirements
- changes to user interface formats
- changes to other service provider or participant systems
- changes to functional specs

RO to identify firm costs & time required

GIC to prepare & undertake where appropriate:
- CBA & qualitative benefits of proposal
- coordination between RO & other service providers if more than one is involved
- project budgeting (capex & opex)
- consultation & communications with industry participants

Approval

Assess the change against the criteria for a CR or SDA. Once agreed which document to use, prepare the documentation and submit to GIC

GIC decision: Shall change proceed? — No → End

Yes

Preparation

GIC or RO prepares change request or implementation agreement and SPA changes as appropriate → GIC & RO agree to change provisions → RO prepares changes to functional specs as appropriate

GIC approves

Implementation

RO implements change as per agreement following accepted project management & system change methodologies

GIC involved as agreed, e.g.
- approves system tests, participant UAT, software audit
- coordinates project if more than one service provider involved
- communications with industry

GIC final acceptance of change

Transition to production and change audit completed

Completion

Variation to SPA published
Debrief between RO and GIC and audit reviewed