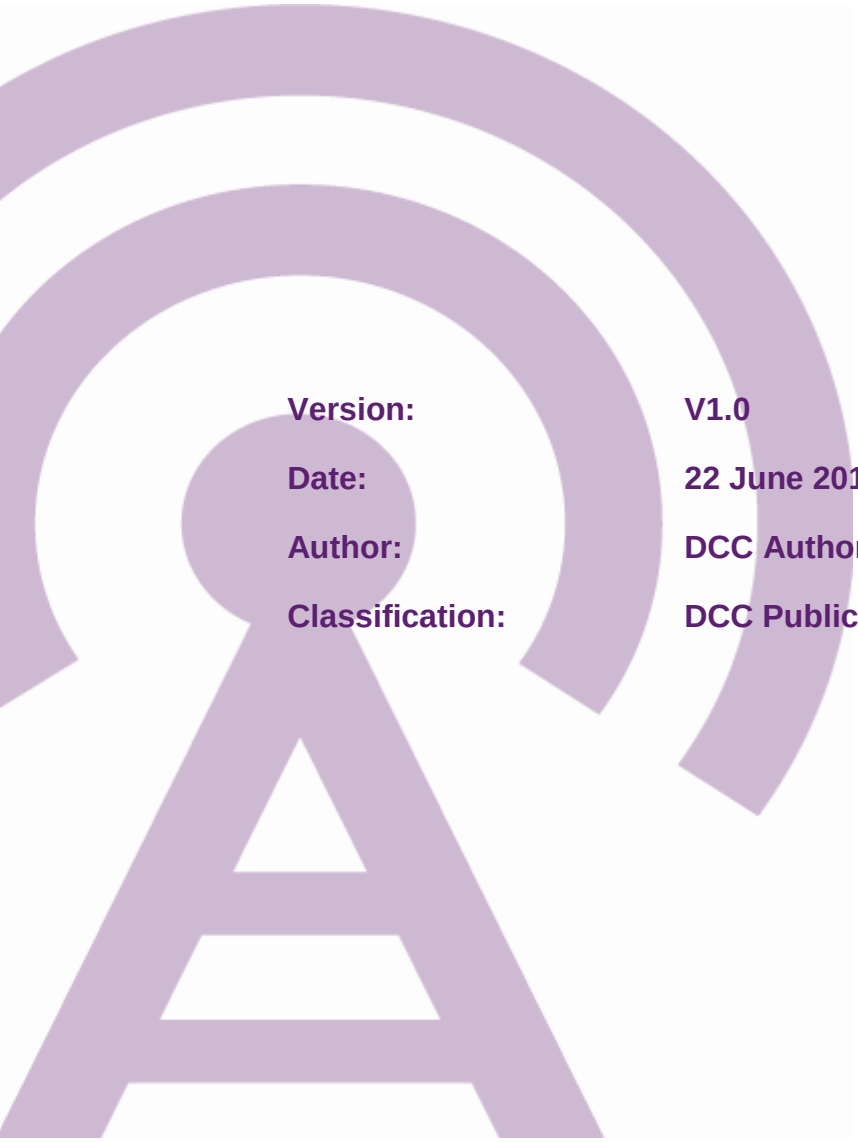
Data Communications Company

Switching Programme

D-10.2 CSS Service Management Requirements



Version:	**V1.0**
Date:	**22 June 2018**
Author:	**DCC Authored**
Classification:	**DCC Public**

Document Control Heading

Revision History

Revision Date	Summary of Changes	Changes Marked	Version Number
22/06/2018	Publication for DB4	n/a	V1.0

Reviewers

Name	Title / Responsibility	Release Date	Version Number

Approvals

Name	Title / Responsibility	Release Date	Version Number
	TDA Chair	22/06/2018	V1.0

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1 Introduction

The current change of supplier processes for gas and electricity operate independently and are based predominantly on batch systems. Each organisation involved operates its own Service Management (SM) processes.

The Ofgem Switching Programme will deliver faster switching – including the capability for next-day switching and improved reliability of the switching process through better management and oversight of industry data. It will introduce a new, flexible overall Central Switching Service (CSS) for gas and electricity switches.

1.1 Service Management and Switching

Service Management will implement and manage a quality CSS (including the Registration Service, Address Service and Switching Network) to meet the needs of the new Switching Arrangements. Its purpose is to enable the Switching Programme to:

- plan
- design
- deliver
- operate, and
- control

the ongoing delivery of CSS to market participants (its customers).

The proposed SM will create an environment that will provide an effective cross-service provider operation, making sure that all CSS Service Providers and existing providers of Central Data Services (CDSs) contribute to the successful and cost-effective management of the Switching Arrangements.

Effectively, it is a service management '*wrap*' that wraps around the technology that is provided by each of the service providers to underpin the Switching Arrangements. It is provided by service providers through an appropriate mix of people, processes and information technology.

SM will be co-ordinated and managed by the Switching Operator who will have the licence obligations to do so. This will be the Data and Communications Company (DCC).

It has been designed to achieve:

- co-ordination of service management across the new Switching Arrangements including (existing CDS providers and CSS Service Providers);
- the required quality of services provided;
- reduced risk in loss of service provision; and
- compliance with good practice.

Switching Service Management will follow an ITIL-based lifecycle and will provide a set of best practice capability to effectively manage delivery of all services across the new E2E Switching Arrangements.

It will be underpinned by a single CSS SMS that will store all CSS tickets, and a CSS Portal that enables Market Participants (MPs) access to switching services, data and systems.

A centralised Switching Service Desk (Switching SD) will provide a single point of contact for Market Participants. It will work with Market Participants, CSS SPs and existing CDS

providers to ensure that incidents are resolved effectively and within Service Level Agreements (SLAs).

1.2 Scope

The purpose of this Service Management Requirements product is to define and document the SM requirements that are to be placed on both new CSS SPs and existing CDS Providers to meet the needs of the new Switching Arrangements.

This CSS Service Management product will define:

- the SM requirements for the new CSS SPs; and
- the SM requirements that existing CDS providers will need to meet for the new Switching Arrangements.

This document will be used to form part of the procurement tender pack that is to be provided to prospective CSS service providers who will be required to deliver a set of Service Management products and services as part of their contracted deliverables.

It will also be used to define clear and unambiguous requirements that can be written into regulatory obligations for existing Central Data Services (CDSs).

The scope of this document covers the service management functions for all Switching-related activities of both the new CSS SPs and the existing CDS providers. It does not cover any activities that existing CDS providers undertake outside of the new Switching Arrangements.

It excludes any functionality in existing CDSs that does not relate to the new Switching Arrangements.

This product consists of a covering document plus a detailed requirements spreadsheet.

This product has extracted any requirements identified as applicable to Switching Service Management from the D-4.2 CSS Design and D-4.1 E2E Design product sets and from the SM products already produced and approved[1].

1.2.1 Service Providers

This document covers the Switching SM systems, processes and people of:

- existing providers of CDSs (including Xoserve (UK Link, DES), Distribution Network Operators (MPASs), Gemserv (ECOES) and DCC (DSP for Smart Metering))
- any existing Communications Network providers that may be used by Switching (including Information Exchange (IX) managed by Xoserve, and the Data Transfer Service (DTS) managed by Electralink);
- the new CSS SPs that will be procured as part of the Switching Programme including the Registration Service Provider, the Address Service Provider and potentially a new Switching Network.
- the providers of the CSS Service Management System and Self-Service Portal.

It also explains how workarounds and manual business processes will be managed.

[1] Abacus: Abacus link

E2E design documents published on Ofgem website: E2E Design documents

1.3 Key Principles

The approach to Service Management is built around the following key principles:

1.3.1 Continuous Improvement

The service seeks to continually improve the operation of the new Switching Arrangements. Therefore, all service providers are required to seek opportunities to improve their services. They will also agree to work collaboratively with other service providers to identify and implement improvements to services or processes that span service providers.

1.3.2 "Shift Left"

The "shift left" principle shall operate wherever possible to improve the resolution of incidents and fulfilment of requests, ensuring that these are carried out at the earliest point.

This principle means that the wherever possible, CSS SM will move things that are typically done in later stages, earlier. In Switching this will involve:

- information being provided to Market Participants to enable them prevent issues, or to solve their own issues.
- where incidents and requests are still required, that these are resolved by first line support, rather than requiring second/third line assistance.

1.3.3 Self-Service

The default approach is to enable Market Participants to access information they require without Switching SD intervention

Market Participants will be able to raise incidents and requests themselves using the CSS Portal and to view the status and resolution.

1.3.4 Good Practice

Processes shall adopt good practice and wherever possible shall align to those pre-configured in the relevant Service Management tools i.e. the CSS Service Management System (CSS SMS) and Portal.

1.3.5 Automation

Processes should be automated wherever possible. Where workarounds or manual processes are required to resolve incidents, these will be followed by an automated solution as soon as practicable.

1.3.6 Processes and Tools

CSS will be operated and supported by a single, integrated set of processes and tools.

All Switching-related Incidents and Service Requests will be stored in the CSS SMS.

1.3.7 Single Point of Contact

There shall be Single Service Desk for CSS to provide a single point of contact for all Switching-related issues and contact.

1.4 Key Outcomes Required

The CSS SPs and existing providers of CDS shall align their process and procedures to ITIL and the Switching Operator to deliver the following outcomes:

- alignment of service management across all service providers to drive the efficiency and effectiveness of an end to end service;
- coordination of services management across multiple providers to meet tighter SLA's;
- a single point of contact to customers to improve quality of service;
- end to end performance monitoring to improve customer satisfaction;
- real time monitoring and alerting of services to provide a proactive response to issues or to resolve potential issues;
- monitoring the effectiveness of Service management and making recommendations for improvement;
- implementing improvements to the levels of service wherever the service is failing;
- producing service management information, including KPIs and reports across the end to end service.

1.5 Service Management Product Set

This document and its associated spreadsheet should be read in conjunction with the following products:

- CSS Service Management Tools Requirements (D-10.4)
- CSS Detailed Operations Requirements (D-10.3).

These requirements products follow on from the Switching Service Management Strategy (D-4.1.9) and Switching Service Management Approach (D-4.2.3) that defined Service Management for the new Switching Arrangements.

The following diagram shows the products that form the Service Management and Operations product set.

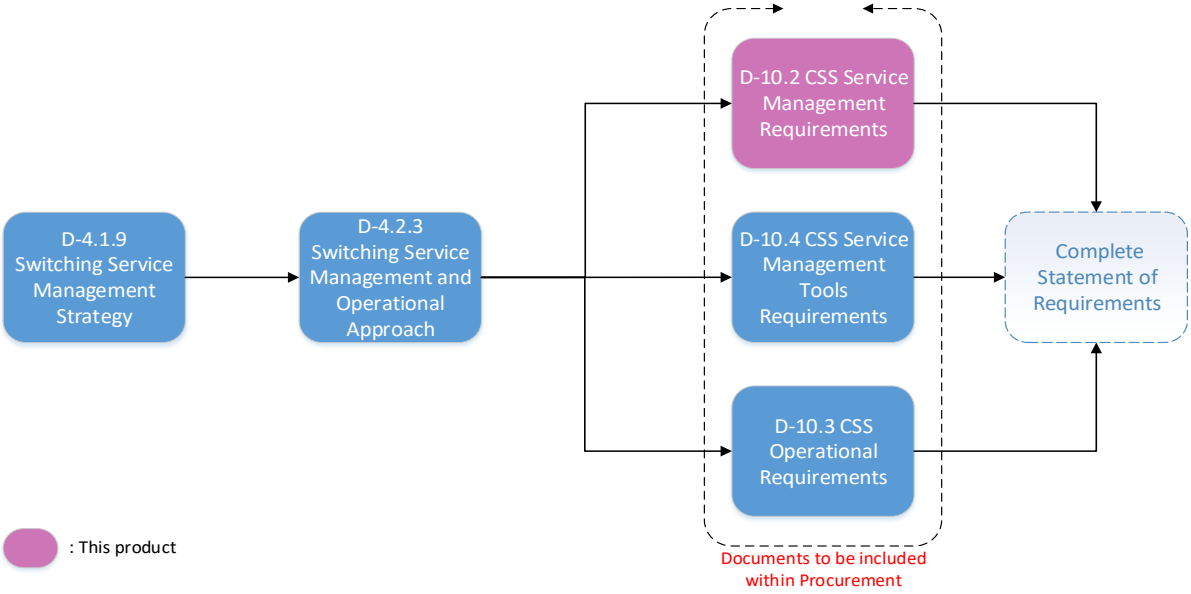


Figure 1 – Service Management and Operations Products

Each of the three requirements products is for a different target audience and consists of:

- a word document that sets the context and provides explanatory text and diagrams.
- a spreadsheet that includes the detailed requirements.

Product & Audience	Description
CSS Service Management Requirements (D-10.2) ***For all service providers***	This product contains the detailed requirements for all Service Management functions that are to be fulfilled, for the procurement of CSS SPs and the statement of requirements for existing CDS providers. The requirements defined in this document are expected to be met by each service provider.
CSS Service Management Tools Requirements (D-10.4) ***For SPs that want to provide/develop the CSS SM Tools***	This product defines the requirements for the SM technology that is required to underpin Switching Service Management. This includes: • SM System and • a User Portal required to support Switching. Prospective bidders may bid for either or both, of these systems. The successful bidders will also be required to meet the overall SM requirements as defined in D-10.2 in addition to the tool(s) itself.)
CSS Operational Detailed Requirements (D-10.3) ***For the Switching Operator and SD***	This contains the requirements to be fulfilled by the Switching Operator that will monitor, co-ordinate and report on Service Management across all service providers. This is included in the tender packs, so that bidders can understand what the Switching Operator will do with the SM information provided by all service providers. This will also include: • the operation of workarounds and manual business processes, and • the requirements of the Central Switching SD.

2 CSS Functional and Non-Functional Requirements

The functional and non-functional requirements for CSS (including those for the Registration Service, Address Service and Switching Network Service) have been produced as part of the CSS design and are not repeated in this document.

2.1 Service Management Requirements

The new Switching Arrangements will only be fully successful if they are monitored, managed and operated effectively with any issues, incidents or requests that occur processed promptly by the appropriate parties.

The SM product set defines the SM '**wrap'** that must be applied by all service providers to support the set of services that they will provide to CSS, however large or small their service is.

The SM requirements are based on ITIL and include both functional and non-functional requirements. The requirements define the activities that service providers will need to undertake for each ITIL area, but not the actual roles or number of staff required.

For example, each provider will need a point of contact for incident management and escalation, but this does not mean one full-time equivalent (FTE) member of staff must be assigned to this.

Some providers will be able to combine a number of ITIL roles into a single FTE, but larger providers may need more than one FTE for key ITIL roles.

2.2 Terminology

To avoid confusion between the requirements on each service provider and the requirements on the organisation that is operating the CSS, the following terms are used:

Term	Description
CSS Service Providers	Any organisation that is awarded one of the new services that is procured e.g. CSS Registration Service, CSS Self Service Portal, CSS SMS
CDSs	All central data services in the new Switching Arrangements. Existing CDSs include: UK Link, MPAS, DES, ECOES, Smart Metering. As part of the Switching Programme, CSS will become a single new CDS, (containing a number of CSS SPs).
Existing Providers of Central Data Services (CDSs)	Any organisation that provides a central data service as part of the switching processes e.g. Xoserve for UK Link and DES, Gemserv for ECOES and DCC (DSP) for Smart Metering.
Switching Operator	The organisation that is accountable for operating the Centralised Switching Services and will manage and co-ordinate the CSS SM Model.
Market Participants	The industry parties involved in Switching.
service providers **(without capitalisation)**	A collective term for all organisations that provide data or services to the Switching Operator, including CSS SPs, CDS Providers and the Switching Service Desk.

3 Governance

The Switching Operator will be accountable for the operation of CSS under licence conditions introduced by Ofgem and obligations in industry codes.

3.1 Ofgem

Ofgem has accountability for the Switching Programme.

Ofgem has determined the overall requirements of the new Switching Arrangements and has responsibility for incorporating these into a new energy industry code – the Retail Energy Code (REC).

It will also appoint the Switching Operator and set the licence conditions under which it must operate.

3.2 Retail Energy Code

The REC will define obligations on all Market Participants that will be involved in the new Switching Arrangements. It will also include obligations for the DCC (in relation to the Switching Operator and CSS SP requirements) and existing providers of CDSs.

The REC will be managed by a REC Panel that will be overseen by the REC Company (RECCo). RECCo will, amongst other things, procure a Code Manager.

3.3 Switching Operator

The Switching Operator has overall accountability for operating the CSS SM model. It must ensure compliance with the REC and DCC's licence conditions.

DCC, in its role as the Switching Operator, must ensure that its REC obligations are underpinned by contractual arrangements with the CSS SPs and that it manages the CSS contracts to ensure that each of its service providers meets its contractual obligations.

It will also manage the Switching Service Desk to support this, as part of its responsibilities as can be seen in **Figure 2** below.

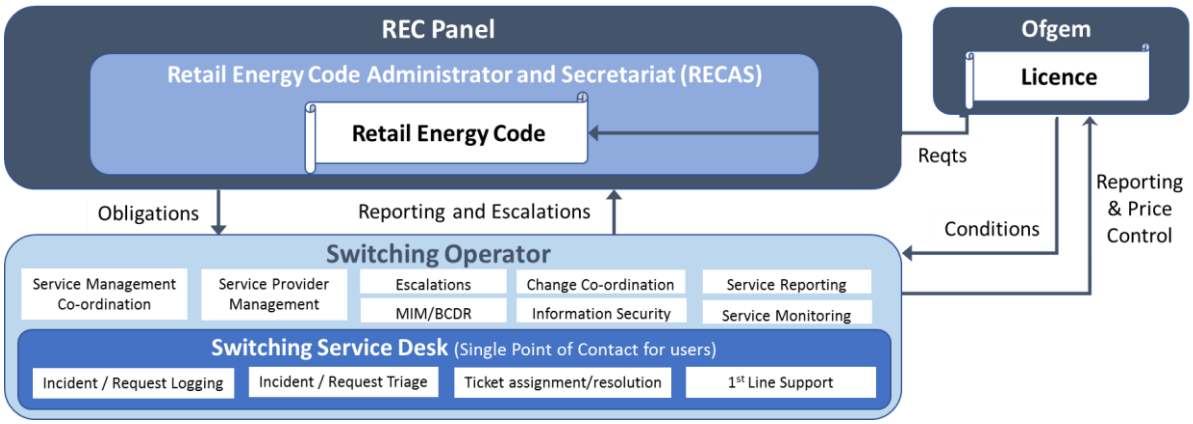


Figure 2 - Switching Operator Governance

4 Service Management Model

As was introduced in SM Approach (D-4.2.3) the SM model is as shown below:

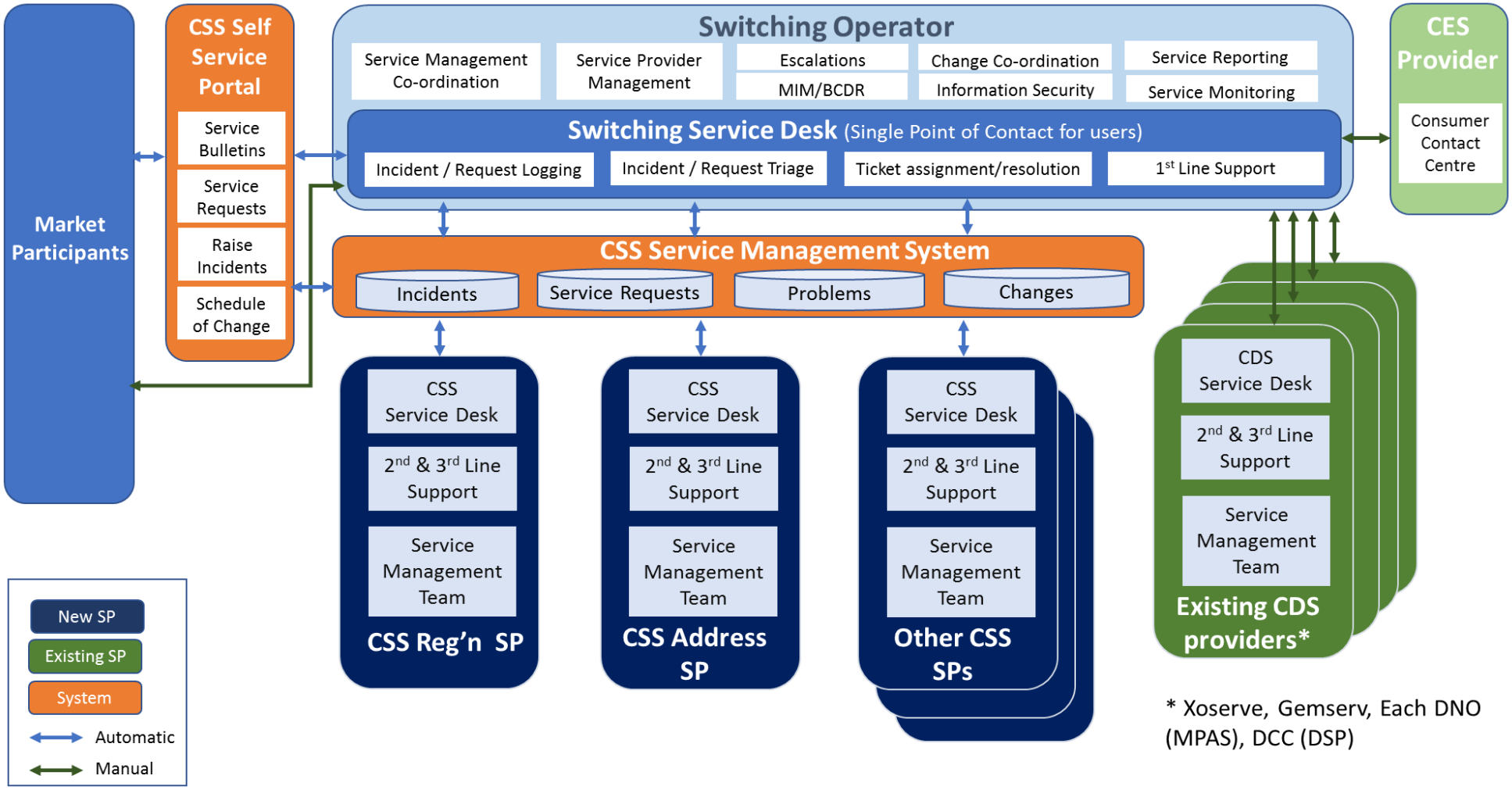


Figure 3 - Service Management Model

4.1 Key Players

The key players in this model are:

4.1.1 Switching Operator

The **Switching Operator** has overall accountability for the live operation of CSS, and the oversight and assurance of all service providers.

It will monitor and review the service performance of each CSS SP and each of the existing providers of a CDS to ensure that the overall obligations, requirements, data stewardship activities and SLAs are met.

It will lead on key Service Management processes including Major Incident Management, Change Management and Service Continuity and will provide an escalation point for all CSS services.

(The activities that the Switching Operator will undertake are described in further detail in D-10.3 CSS Operational Requirements.)

4.1.2 Switching Service Desk

There will be a new **Switching Service Desk** that is provided and managed by the Switching Operator. It will be a Business to Business service desk.

This will provide a single point of contact (SPOC) and first line of support for market participants for all Switching-related queries, incidents and service requests that a Market Participant cannot resolve via the Portal.

It will work with all CSS SPs and existing CDS Providers to manage the CSS SMS and resolve all Switching incidents and requests.

In summary the Switching SD will:

- log all incidents, service requests and queries (tickets) on the CSS SMS and assign to the correct resolver teams;
- work with the service desks of each service provider to manage and resolve all incidents and service requests within the required SLAs;
- escalate tickets where required through the Switching Operator and SP organisations;
- receive information from all CSS SPs and existing CDSs relating to the availability of Switching systems;
- provide co-ordinated information on the E2E Switching Service to all stakeholders;
- be available during each calendar day to support Market Participants; and
- provide a 24x7 service to support the systems and services of the new Switching Arrangements.

Where existing CDS Providers do not directly use the Switching SMS, the Switching Service Desk will receive and load ticket interface files to ensure that the CSS SMS provides a complete picture of Switching for monitoring and reporting purposes.

Switching will operate a 3 Tier Support Model, in order to best serve Market Participants. This is defined in section 5.

(The detailed requirements for the Switching SD are described in further detail in D-10.3 CSS Operational Requirements.)

4.1.3 New CSS Service Providers

As part of Switching, a number of new service providers (SPs) will be procured.

CSS SPs will be responsible for the design, build, testing and maintenance of their individual services, with an appropriate, effective service management function. This should:

- use industry recognised good practice
- integrate into the overall end-to-end Service Management approach defined in the SM document set (see section 1.4).
- meet the requirements defined in this document and its associated spreadsheet.

At a high level, for Service Management, each new CSS SP will be required to:

- provide a Service Management team to deliver the set of Switching SM requirements;
- use the CSS SMS to support its Switching activity;
- provide a service desk to interact with the Switching SD;
- provide knowledge to enable the Switching SD to triage and provide first line support for their services;
- provide 2nd and 3rd line support for its service(s).

The new CSS Registration Service and Address Service Providers will also be required to provide sufficient SM resources to enable the timely resolution of address matching issues and discrepancies.

4.1.4 Existing Central Data Services Providers

The existing industry change of supplier processes use systems and services that will also be used in the new Switching Arrangements. It would not be cost-effective to require each existing CDS Provider to change all its SM processes and systems to use those developed for the CSS. Therefore, the SM requirements are less prescriptive for existing CDS providers.

Each existing CDS will be responsible for its own parts of the new Switching Arrangements and will manage its own services, technology and tools to support these.

As with CSS SPs, their SM should also:

- use industry recognised good practice
- support the end-to-end SM approach defined in the SM document set (see section 1.5).
- meet the requirements defined in this document and its associated spreadsheet.

However, the end to end Switching SM function will also require existing providers of CDSs to provide data, support and reports to the Switching Operator.

CDS providers may also need to make changes to deliver improved support arrangements or hours, and tighter SLAs and to reflect the changes to services required following modifications to the REC.

An existing CDS provider may use the CSS SMS if it so wishes, but may continue to use its own SMS and provide information to the Service Desk to load into the Switching SMS to provide a full end to end picture to market participants.

At a high level, CDS providers will be required to:

- provide SM support to CSS including a service desk capability to interact with the Switching SD;
- provide an interface/data to the CSS SMS to support its Switching activity;
- provide 2nd and 3rd line support for its service(s),
- provide data to CSS to enable the provision of CSS-wide information to Market Participants.

4.1.5 Market Participants

Market Participants will be the primary users of the CSS SM service.

They will interact with SM primarily through the Self-Service Portal but also using email and telephone to the Switching SD as the SPOC for Switching.

4.1.6 Consumer Enquiry Service (CES)

Some customers do not switch energy provider because they do not know who their energy provider is or what their meter point reference number (MPxN) is.

In Reform Package 2a, Ofgem has included the provision of a central Consumer Enquiry Service which would provide their energy supplier and MPxN for both gas and electric.

This is currently on hold.

4.2 SM Tools

The SM tools that will be used for CSS comprise:

4.2.1 Service Management System (SMS)

CSS will be supported by a **Service Management System**.

This will be a central system that will store all incidents, requests and queries for CSS including history and audit trail.

The SMS will underpin the key SM processes of incidents, problems, service requests, change and knowledge. It will also produce reports, dashboards and interfaces to provide Service Management support for the new Switching Arrangements.

(The requirements for the SMS are detailed in D-10.4 CSS SM Tools Requirements.)

4.2.2 Self-Service Portal

CSS will provide a **Self-Service Portal** (the Portal) that authorised representatives of Market Participants can use.

It will be the first point of contact for general Switching queries and requests and will enable Market Participants to become largely self-sufficient improving the service received and reducing the need to contact the Switching SD directly.

The portal will enable users to view service announcements, raise and review progress of incidents, request available switching services, access reports, and provide data to CSS.

It is expected that the Portal will be available at all times, except during planned or unplanned maintenance windows.

(The requirements for the Portal are detailed in D-10.4 CSS SM Tools Requirements).

5 CSS Service Management Perspectives

Service management covers a number of different aspects:

5.1 Customers

The SM customers are the Market Participants that are party to the REC.

These include: Energy Suppliers, Gas Transporters, DNOs, Shippers, MAMs and Supplier Agents. They do not include the individual end-users i.e. the consumers in the individual premises.

The CSS SPs, and existing CDS providers can also be customers.

5.2 Service channels

The primary CSS service channel is the CSS Portal that will allow authorised users to access services, receive CSS information and reports, and raise and view incidents.

Alternative channels include email and telephone to the SPOC i.e. the Switching SD.

Where incidents are reported via email, this should be done using agreed templates, so that the incidents can be uploaded into CSS without the requirement for rekeying.

Telephone contact makes it difficult to verify who the caller is.

The order of channel preference is:

- Portal
- Email
- Telephone.

5.3 Products and Services

Switching provides an improved service for a consumer to change its gas and/or electricity supplier.

This can be broken down into the following sub-services:

- Registration Service
- Address Service
- Switching Network(s)

5.4 Governance

The Governance of Switching is described in Section 3 above.

The REC is the governing industry code and Ofgem is the body that owns the licence conditions.

5.5 Process

The SM processes are based on ITIL good practice and are described at a high level in section 8.

5.6 Data

5.6.1 Master data sources

CSS introduces a new CSS Registration Service. This will operate alongside the existing industry registration systems (UK Link and MPAS).

CSS will become the ‘master’ view of the energy supplier for a meter point.

The existing registration systems will remain the ‘master’ of the agents and settlement data for a meter point.

Synchronisation of data between CSS and the existing registration and enquiry systems will occur whenever changes occur.

5.6.2 Data for Reporting

Each service provider will be required to provide the data required for SM reports. Most of this will be stored on the CSS SMS, but may need additional information from SPs to provide external service reports to Market Participants, REC Panel and Ofgem.

5.6.3 Switching Domain Data

The data used by CSS will use feeds from other industry systems and services and data from the REC Code manager

For example, the list of valid MPIDs and roles will be used to configure the valid MPs.

5.6.4 Data Stewardship

The CSS Registration Service will mostly use address data provided by the CSS Address provider to derive the REL Address, however under certain circumstances manual addresses will need to be input by the CSS Registration Service.

The Switching Operator has accountability for ensuring that this is managed correctly by the CSS Registration Service.

5.7 People

Each service provider will need to determine the roles and responsibilities that it requires to carry out SM. The information in section 9 should be used as a basis for developing the roles and responsibilities that are required.

For the Switching Operator, this is described in D-10.3 CSS Operational Requirements.

5.8 Organisation

There are many organisations involved in CSS Service Management.

These include:

- the Switching Operator (DCC)
- the CSS SPs
- the existing providers of CDSs
- Market Participants.

Market Participants will be parties to the REC and are identified by a Market Participant Identifier (MPID) and a role code that defines the Market Participant's role e.g. 'X' for an electricity supplier.

5.9 Technology

Tooling	Use
Self-Service Portal	Service users can use the self-service portal to: • view CSS information, • access knowledge articles, • view the forward schedule of change, • raise incidents, • raise requests, • track incident progress, and • review reports, all in one place.
Service Management System	The SM processes are enabled by the core CSS Service Management System (CSS SMS) to log, action, route and manage the resolution for all incidents, service requests, problems and changes. It will also store CSS Knowledge.

5.10 Facilities

Each service provider will provide its own facilities.

5.11 Service Providers

These will be a mix of the existing providers of CDSs that are required to support the new Switching Arrangements, and new service providers that will be procured as part of CSS.

5.12 CSS Support Model

Switching will operate a 3 Tier Support Model, in order to best serve Market Participants and provide a cost-effective service.

5.12.1 Three-Tier Support Model Explained

This means that support is subdivided into 3 tiers, or levels, each with different levels of in-depth technical knowledge.

The reason for providing a multi-tiered support system instead of one general support group, is to provide the best possible service in the most efficient possible manner. It makes no sense having detailed technical support available to resolve low level issues.

The success of the support model is dependent on the support staff's understanding of their level of responsibility and commitments, their customer response time commitments, and when to appropriately escalate an issue and to which level.

On top of the 3 tiers described below, there is also a 'Tier 0'.

Tier	Definition	In Switching
0	This assistance is in the form of 'knowledge' or FAQs that allow users to access and resolve information on their own rather than have to contact a Service Desk for resolution.	CSS service providers will create and publish knowledge articles via the Self-Service Portal. Market Participants will be encouraged to use this knowledge base to resolve their own issues, before contacting the Switching SD or raising a ticket.
1	This is the initial support level responsible for dealing with basic customer MP issues. It is also known as first-line support. The first job of a level 1 analyst is to gather information from the customer: • what the user is trying to achieve, • screen name or report name, • error or warning message displayed on the screen, • any log files, screen shots, • any data used, • or any sequence of steps used by the end user. This information will need to be recorded into the ticket logging system and will be used to analyse the symptoms and define the problem or issue. The severity or priority will be based on an agreed Impact / Urgency matrix. Once identification of the underlying problem is established, the analyst can begin sorting through the possible solutions available. This first line support will typically handle straightforward and simple problems using knowledge or diagnostic tools that it has been provided with, e. g. username or password resets. The end goal for this group is to handle up to 50% of the user problems before it is necessary to escalate the issue to a higher level, however the extent to which this can be achieved depends on the knowledge that is made available to Tier 1 analysts. Analysts at this level have a basic to general understanding of the product or service and may not have the competency required for solving complex issues. Where first line support cannot resolve the issue, the issue will be assigned to tier 2 or tier 3 analysts.	Switching aims to resolve incidents as part of a 'log, triage and first line resolution' process carried out by the Switching SD. All incidents, queries and service requests that a market participant cannot resolve using the knowledge available, will be raised as a ticket on the CSS SMS. This will be done: either by the market participant using the SM Portal, or by the Switching SD following an email or call from the participant. To enable the Switching SD to provide 1st line support, all service providers will be required to provide knowledge, tools and access to data. This will then allow the Switching SD to additionally: • triage all tickets using automated/scripted diagnostic information and tools that enables the resolution of a high proportion of incidents without recourse to the 2nd line SP support teams; • provide 1st line support using knowledge provided by each SP. Failure to provide this will result in a 'log and flog' Switching SD which may not be able to meet the SLAs.

Tier	Definition	In Switching
2	Second line support is provided using more detailed, technical knowledge of the services. This is a more in-depth technical support level than Tier 1 and therefore costs more as the technicians are more experienced and knowledgeable on a particular product or service. Tier 2 support staff are responsible for assisting Tier 1 personnel in solving basic technical problems and for seeking for known solutions for more complex issues. It is important that the Tier 2 analyst reviews each work order to see what has already been accomplished by the Tier 1 analyst and how long they have been working with the affected customer. This is a key element in meeting both the customer and business needs as it allows the technician to prioritise issues to ensure that SLAs are met and that their time is effectively managed. If a problem is new and/or personnel from this group cannot determine a solution, they are responsible for raising this issue to the Tier 3 support group. Some issues may be assigned directly to a tier 3 support group to ensure that challenging issues are solved by providing experienced and knowledgeable staff.	This will be provided by the CSS SPs and existing CDS Providers. Each organisation is required to maintain 2nd line service desk and support capabilities for its parts of the Switching Arrangements. This support will mostly be required during the day but will also be needed overnight to resolve any issues with overnight processes.
3	This is the highest level of support in a three-tiered support model and is responsible for handling the most difficult or advanced problems. Tier 3 individuals are subject matter experts in their fields and are responsible for not only assisting both Tier 1 and Tier 2 personnel, but also with the research and development of solutions to new or known issues. This Tier 3 team will analyse the issue and data using information from Tier 1 and Tier 2 and will resolve the ticket.	This will be provided by the CSS SPs and existing CDS Providers. Each organisation is required to maintain service desk and 3rd line support capabilities for its parts of the Switching Arrangements. This support will mostly be required during the day but will also be needed overnight to resolve any issues with overnight processes.

5.13 The Switching Support Model in practice

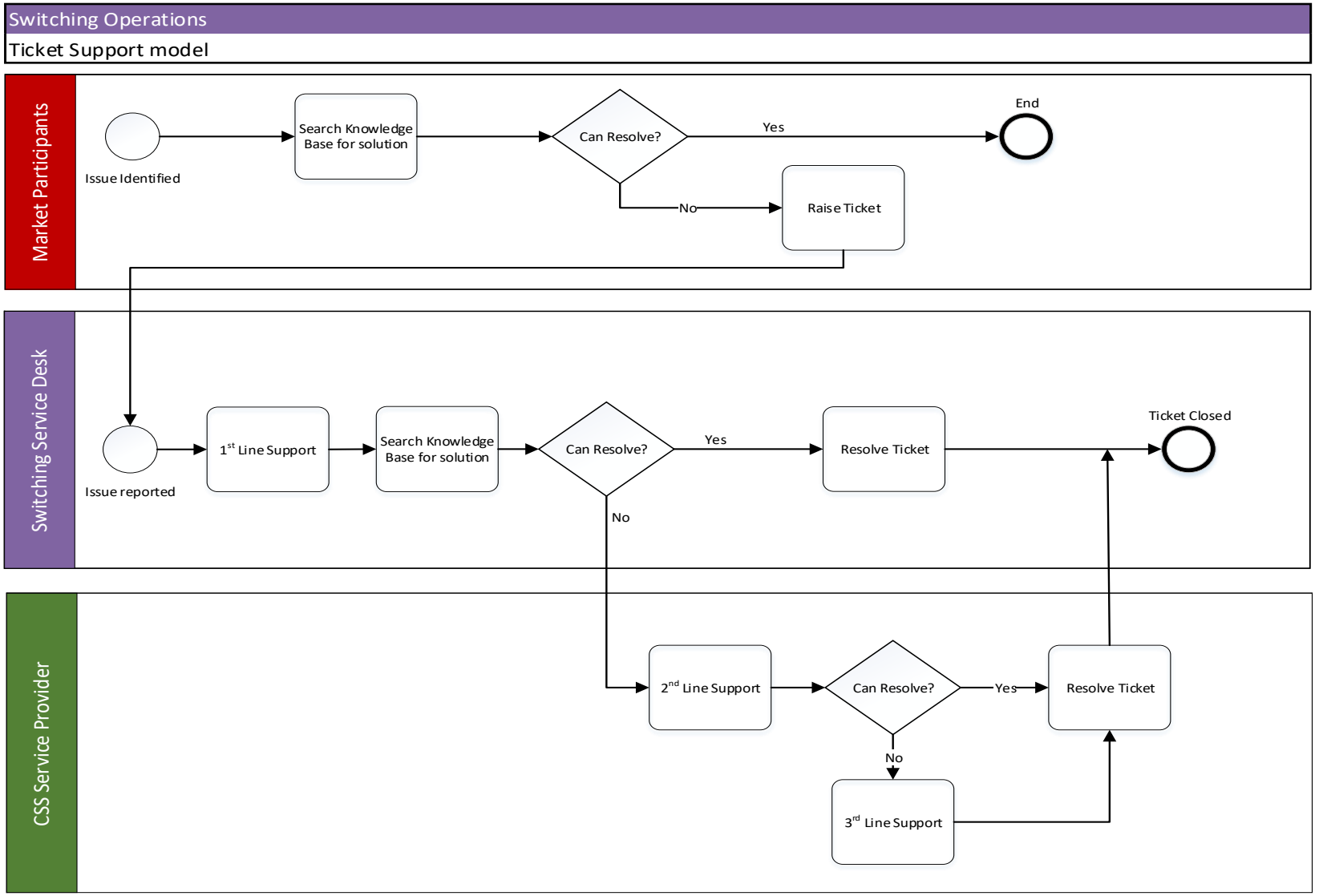


Figure 4 - Switching Support Model in Practice

6 Service Level Targets

SLAs (Service Level Agreements) are collections of Service Targets. Each of those targets can be weighted in importance. An SLA then allows a holistic view of how the service is being delivered (rather than individual targets).

Whilst it is possible to set overall SLAs for each severity level for incidents, this will only really be the target that CSS will aim for.

Different types of incidents and requests will take different lengths of time to resolve e.g. a password reset can be achieved much faster than the installation of a new communication connection.

As a result, CSS will set detailed service level targets and agreements, for each type of incident and for each type of service request.

This cannot be completed until the detailed design of the service provider solutions is complete and the expected incident types and service requests are agreed.

At that point, detailed SLAs and targets will be set for each type.

However, as an indication of the targets that CSS will aim for, the general target resolution times are shown below for information purposes only.

	Description	Details
Incident Management		
Sev 1	A Category 1 Incident which prevents a large group of Market Participants from using Live Services. This will almost certainly be a Major Incident.	Target Resolution Time: 4 hours
Sev 2	An Incident which has an adverse impact on the activities of participants, but the Live Service is still working at a reduced capacity.	Target Resolution Time: 24 hours
Sev 3	An Incident which has an adverse impact on the activities of a participant, but can be reduced to a moderate adverse impact due to the availability of a workaround.	Target Resolution Time: 72 hours
Sev 4	An Incident which has a minor or minimal adverse impact on the activities of a participant.	Target Resolution Time: 10 days
Request Fulfilment		
Sev 1	**Critical** priority request	Target Fulfilment Time: 24 hours
Sev 2	**High** priority request	Target Fulfilment Time: 48 hours
Sev 3	**Medium** priority request	Target Fulfilment Time: 3 days
Sev 4	**Low** priority request	Target Fulfilment Time: 10 days

	Description	Details
Major Incident Management		
1	A Category 1 Incident (Major Incident) which prevents a large group of Market Participants from using Live Services.	Target Resolution Time: 4 hours
2	An Incident which has a non-critical adverse impact on the activities of participants, but the Live Service is still working at a reduced capacity.	Target Resolution Time: 24 hours
3	An Incident which has an adverse impact on the activities of a participant which can be reduced to a moderate adverse impact due to the availability of a workaround.	Target Resolution Time: 72 hours

7 Service Management Reporting

Existing providers of CDSs and CSS SPs are required to make data available to the Switching Operator to enable a suite of internal and external SM reports to be produced.

Each service provider is required to ensure that all Switching-related tickets are kept up to date on the CSS SMS. Therefore, much of the data for the reports is expected to be available directly from the CSS SMS. Where this is not the case, each service provider will be required to provide data to the Switching Operator through an alternate method.

The required reports are expected to include:

7.1 External

This will be confirmed when the final Retail Energy Code (REC) is available.

Recipient	Report Name	Frequency	Key Contents of Report
Ofgem, BEIS, REC Panel	Monthly Raised Problems Summary Report	Monthly	• Problems raised • Details • Status
Ofgem, BEIS, REC Panel	Switching KPIs	Weekly	• Status of Incidents, • Switching Components Availability, • Portal Availability, • Switching requests processed, • Address issues identified • Users on boarded,
Ofgem, BEIS, REC Panel	Weekly Incident Reports	Weekly	• Raised/Closed Incidents, • Incident ID/Category, • Summary of Incident, • Status/ Status Reason, • Resolution details
Ofgem	Security Incident Report	6 Monthly	• No. of Major vs Non-Major Incidents • Incident Details
Ofgem, BEIS, REC Panel	Switching Major Incident Review Report (for a single MI)	Weekly	• Description of Major Incident • Incident and resolution details • Root Cause • REC Mods Required
Ofgem BEIS, REC Panel	Switching Major Incident Summary Report	Weekly	• Description of Major Incident • Incident details • Resolution details • Root Cause • SLAs met?
Ofgem, BEIS, REC Panel	Switching Performance Measurement Report	Monthly	• Details of Service Levels as per REC • Performance Measures • Service Levels required/met • Exceptions permitted
REC Panel	Registration Data Incident Report	Monthly	• Registration Data Incidents • Incidents details
REC Panel	REC Panel Quarterly Report	Quarterly	• Significant and/or Impacting Open Problem records, • Problem details

7.2 Internal

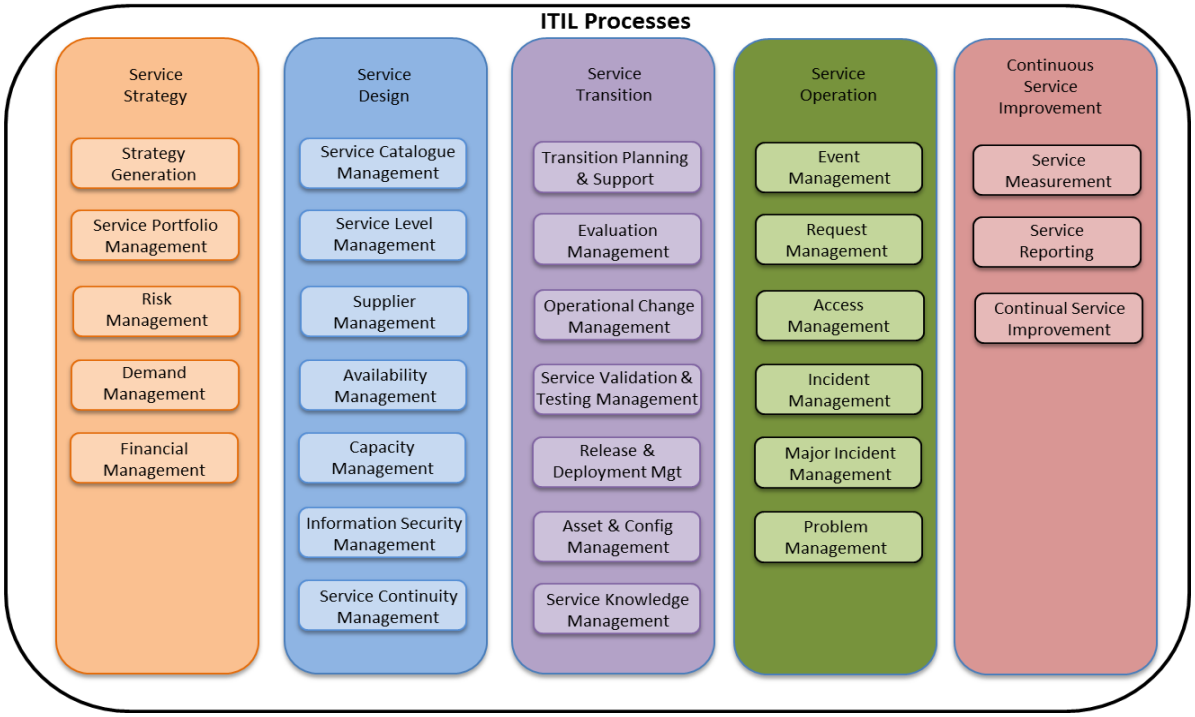
The following list shows the typical reports that would be expected in order to manage CSS, and hence the data that needs to be available.

The complete list will be agreed during the DBT phase of the Programme.

SM Area	Report Name	Frequency
Security Management	• Anomaly Detection Thresholds Set • Access Management Report	Weekly Real Time
Change Management	• Number of Changes - All, Successful, Failed • Number of emergency/expedited/latent Changes • Notification of Planned Maintenance • Delivery of Risk & Impact Assessments • Open Changes by Status and Status Reason • Live Change Management Internal Dashboard	Real Time
Capacity Management	• Capacity Management Internal Dashboard • Demand Management Internal Dashboard	Monthly Up to 1 hour
Incident Management	• SP Incident Compliance Metrics • Incidents by User Organisation • Average time to assign, by priority, by SP • Market Participant Incident Resolution Metrics • Incident Breach Reason Profiles • Incident Trend Report • Incidents Raised - Recent Hour • Weekly Incident Management Pack • Live Incident Management Internal Dashboard • Incident Management First Time Fix Report	Real Time Real Time Real Time Real Time Real Time Real Time Real Time Weekly Real Time Real Time
Performance Management	• Switching Network Performance Report (user) • Monthly Performance Measurement Report • Monthly Performance Measurement Data • Performance Measurement Internal Dashboard • Service Failures for Provider Internal Dashboard • Monthly Switching SD Performance Pack • Provider Monthly Incident Performance Report	Monthly Monthly & Annual Monthly Monthly Monthly Monthly Monthly
Problem Management	• Volumetric report on All Open Problems • Number of Problems resulting in a CR	Monthly Monthly
Knowledge Management	• Knowledge Performance Internal Dashboard • Knowledge Management Performance Monitoring	Real Time Monthly
Release Management	• Number of successful/failed releases	Real Time
Service Desk	• Switching SD Performance Dashboard • Switching Incidents Raised Assigned to Switching SD • Switching Incidents - First Time Fixed (%) • Open Incidents by Severity Switching SD • Open Incidents Approaching Thresholds	Monthly Real Time Real Time Real Time Real Time
Service Management	• Switching Service Management Dashboard • User Major Incident Report • User Monthly Open Incident Report • Number of Service Requests Raised / Completed • Open Work Orders by Severity by SP	Real Time, Week Major Incident Monthly Weekly Real Time

8 ITIL Service Management Processes

The ITIL framework is divided into 5 stages, each with a number of processes shown in that stage.



This does **not** mean that the processes that are shown for a stage, **only** apply during that stage. Instead it shows the stage within the ITIL lifecycle that the process needs to **start** to be considered.

Examples:

1) '**Supplier Management**' is shown in **Service Design**, as it is here that the service providers are determined and the contractual arrangements with them are negotiated and agreed. To be clear, this is an ITIL term, and relates to service providers, not Energy Suppliers.

   From this point, Supplier Management is required throughout:

Design, Build and Test:	to ensure that the service meets the requirements and works correctly
Transition:	to plan, manage and move the service into Live Service Operation
Service Operation:	where management of Suppliers is a fundamental part of the business and paramount to the success of the Switching Arrangements
Continuous Service Improvement:	where the service is monitored and opportunities for service improvement explored.

2) '**Service Catalogue Management**' is also shown in **Service Design**, as it is here that full list of services available are defined and agreed. The service catalogue will then be used in live Service Operation. It will only change if new services are developed.

9 Key Switching Service Management Processes

This section describes the key Service Management processes and explains how they will work in the Switching Arrangements.

It shows the scope, high-level flow, the roles and responsibilities, service level agreements and key performance indicators for each process.

9.1 Roles and Responsibilities

The sections below define the key roles and responsibilities for each process.

This has been done by identifying the owner, manager, participants and customer for each process. The responsibilities associated with these roles are explained in the following table:

Process Role	Key process responsibilities
Process Owner	Accountable for ensuring all processes required for the efficient delivery of the Switching service are fit for purpose. The process owner's responsibilities include but are not limited to: • Sponsorship, design, change management and continual improvement of the process and its metrics; • Defining the process strategy with periodic reviews to facilitate process improvements; • Providing assurance and audit functions to ensure processes are being adhered to • Awareness and oversight of processes administered by other service providers. For the majority of processes, the Process Owner is the Switching Operator in its role to operate, manage and co-ordinate the CSS SPs and existing CDS provider activities required for end to end service management for Switching related activities. **Note:** This does not remove the need for similar processes and procedures within service providers organisations.
Process Manager	Responsible for the operational management of a process and the coordination between CSS SPs and existing CDS providers. The process manager's responsibilities include but are not limited to: • Planning and coordination of all activities required to carry out, monitor and report on the process; • Working collaboratively with Process Participants to ensure the smooth running of the Switching Service. **Note:** This does not remove the need for similar processes and procedures within service providers organisations.

Process Role	Key process responsibilities
Process Participant	Responsible for performing one or more activities within a process. This role can be combined with the Process Manager role if appropriate. The process participant's responsibilities include but are not limited to: • Ensuring inputs and output for their activities are accurate and completed within the agreed SLAs or OLAs; • Assisting the Process Manager with coordination activities; • Creating and updating records (in the CSS SMS) to reflect that activities have been carried out correctly.
Process Customer	The Process Customer is someone that uses the service. The Process Customer responsibilities include but are not limited to: • Consuming services within defined constraints; • Reporting issues identified with the service using the preferred channels; • Providing feedback on consumed services to facilitate continual improvement; • Assisting with the resolution of issues where necessary.

9.2 Incident Management

Incident Management (IM) is the process for managing the lifecycle of all Incidents (or things that have gone wrong). The primary objective of IM is to return a working service to Market Participants as quickly as possible, through the introduction of a workaround or a permanent solution to the underlying problem.

IM is underpinned by the CSS SMS to action, route and provide guidance and resolution for all incoming incidents.

The Switching Operator will establish and manage the overall IM process for the management and resolution of Switching incidents and queries. This will be co-ordinated with the IM processes of existing providers of CDSs and CSS SPs.

The process ensures that all incidents are resolved by the first line Switching SD (if possible) or the second/third line SP support teams as appropriate.

Progress of incidents through to resolution and closure will be monitored and reported on, to provide feedback on progress to market participants.

The process also includes incident escalation, management of Major Incidents and an interface to Problem Management.

The Switching SD will work with the existing providers of CDS and CSS SPs to manage and resolve Incidents. All CSS SPs and existing CDS Providers will need to maintain 2nd line Service Desk capabilities and relevant resolver groups as needed to maintain the Switching Services.

9.2.1 Scope

The scope of the IM process covers:

- Support to Market Participants with any issue associated with the Switching Service;
- Support and Incident Management coordination to all service providers.

Whilst only those aspects detailed above are included within the scope of Incident Management, the following exclusions are included to aid reader understanding:

- Management of Incidents that are not related to the Switching service;
- Internal IM processes and procedures that each service provider shall put in place to detect and resolve issues found.

9.2.2 Roles & Responsibilities

Process Role	Responsible Party	Key process responsibilities
Process Owner	Switching Operator	The Switching Operator is responsible for defining the Incident Management process and assuring the process meets the Switching service needs.
Process Manager	Switching Service Desk	The Switching SD is responsible for managing all aspects of the incident process and lifecycle reporting of incident management metrics to the Switching Operator.

Process Role	Responsible Party	Key process responsibilities
Process Participants	Switching Service Desk	The Switching SD is responsible for providing 1st line support whose duties will include but not be limited to: logging, triage, escalation and resolution of Incidents that are reported by the MPs, existing CDSs or CSS SPs. The Switching SD will monitor Incidents throughout its lifecycle from its creation to closure.
	CSS Service Provider Existing CDS Provider	The responsibility of the existing CDSs and CSS SPs is to assess and resolve incidents that cannot be resolved within the Switching SD. If the incident cannot be resolved at 1st line, the assigned 2nd line support will follow their internal escalation process and notify the Switching SD of progress towards resolution and when the issue has been resolved.
Process Customer	Market Participants	MPs are responsible for the identification and raising of incidents to the Switching SD. The incident will be raised via the Self-Service Portal (the Portal), email or telephone. Once the issue has been resolved by the appropriate resolver group, the MPs will be informed so that they can update their internal systems and close the incident.
	CSS Service Provider Existing CDS Provider	Switching service providers are responsible for the identification and raising of incidents on to the CSS Service Management System (CSS SMS). Once the issue has been resolved by the appropriate resolver group, the Switching SP will be informed so that they can update their internal systems (where required) and close the incident.

9.2.3 Process Summary

The following diagram shows the high-level Incident Management process.

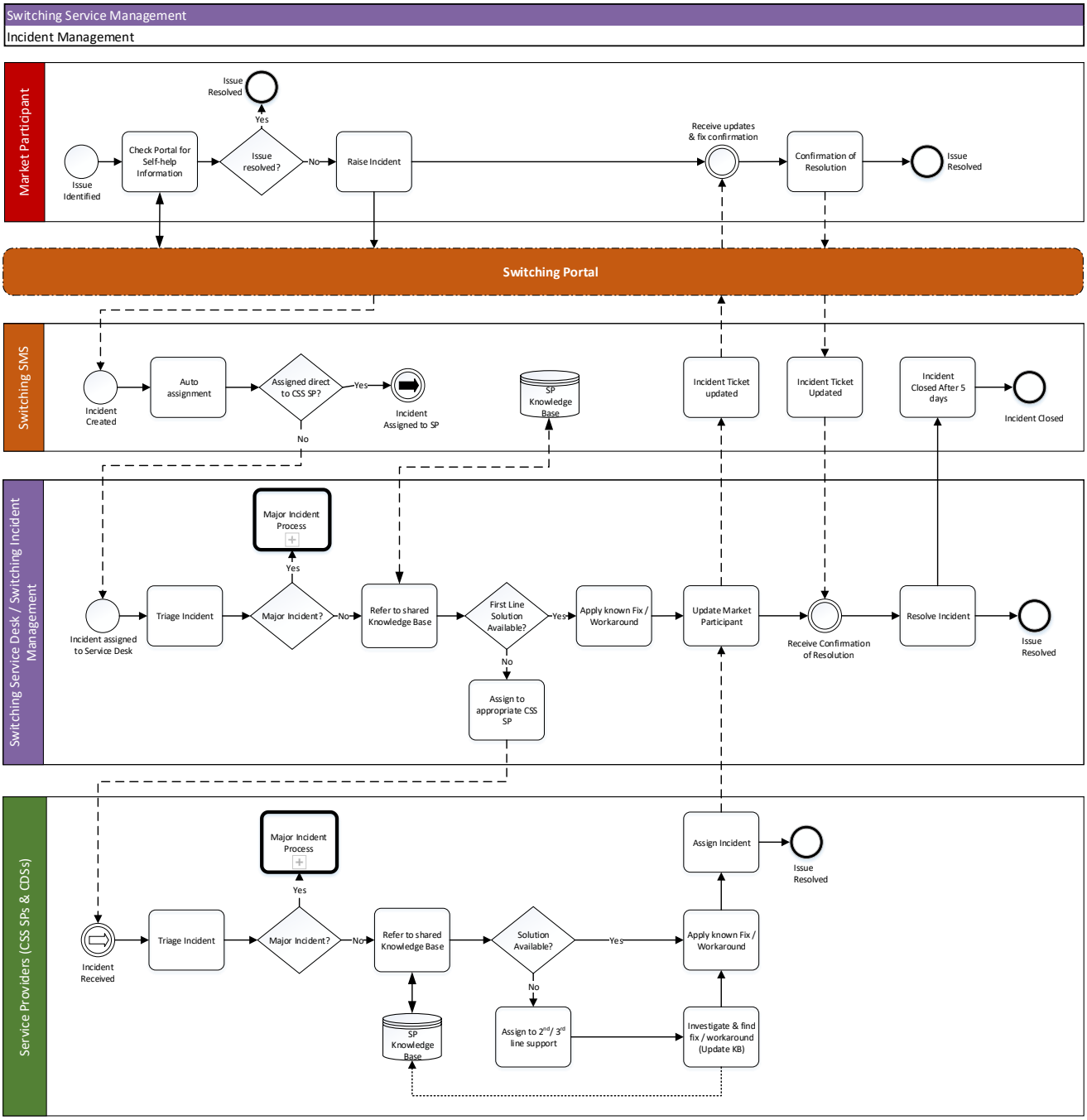


Figure 5 – Incident Management

9.2.4 Incident Response Targets

Priority	Description	Target Resolution Time
1	A Category 1 Incident which prevents a large group of Market Participants from using Live Services. Most Major incidents will be category 1	4 hours

Priority	Description	Target Resolution Time
2	An Incident which has a non-critical adverse impact on the activities of participants, but the Live Service is still working at a reduced capacity.	24 hours
3	An Incident which has an adverse impact on the activities of a participant but which can be reduced to a moderate adverse impact due to the availability of a workaround.	72 hours
4	An Incident which has a minor or minimal adverse impact on the activities of an Incident participant.	10 days

9.2.5 Process KPIs

In order to measure and assess the effectiveness of the Incident Management process, Key Performance Indicators (KPIs) shall be used, but not limited to the following:

Key Performance Indicators
Percentage of repeated Incidents with known resolution;
Incident working duration by resolver group;
Incidents which have been re-assigned between resolver groups more than 2 times;
Frequency in which tickets move from resolved to working;
Incident resolution time by Incident category;
Percentage resolution rate for first time fixes (Resolved by Switching SD);
Percentage of Incidents resolved within SLA;
Estimated work effort for Incident resolution per Incident category;
Percentage of reassigned incidents.

9.3 Major Incident Management

Major Incident Management is an extension of the IM process and manages the highest impact incidents that result in significant disruption to the business. The process defines a set of resources to be called upon to resolve Major Incidents and it also interfaces with the Problem Management process.

The Switching Operator will appoint a Switching Major Incident Manager (MIM) who will manage all incidents categorised as Major Incidents (MI) and allocated to the Switching SD to resolve. For MIs that are allocated to CSS SPs to resolve, the Switching MIM will appoint a nominated individual to track the MI and update market participants on progress.

Each existing CDS and CSS SP must provide an MI communications contact list of appropriately experienced and qualified specialists that are available to be contacted and

deployed to MI teams. Real-time performance information may be required from the Service Providers during an MI.

The Switching Operator will report MIs to the REC Panel and will conduct MI reviews to identify opportunities to manage future MIs more effectively.

9.3.1 Scope

The scope of the MI Management process covers:

- The highest level of support to Market Participants when high impacting issues associated with the Switching Service(s) have been identified;
- Support and Incident Management coordination to all service providers where a high impacting and high urgency issue(s) is identified with the Switching Service(s).

Whilst only those aspects detailed above are included within the scope of Major Incident Management, the following exclusions are included to aid reader understanding:

- Management of Major Incidents that are not related to or have an impact on the Switching service;
- Internal Major Incident Management process and procedures that each service provider shall put in place to detect and resolve issues found.

9.3.2 Roles & Responsibilities

Process Role	Responsible Party	Key process responsibilities
Process Owner	Switching Operator	The Switching Operator is responsible for defining the Major Incident Management process and assuring the process meets the Switching service needs.
Process Manager	Switching Operator	The Switching Operator will appoint a Major Incident Manager (MIM) who will manage each Major Incident raised, ensuring that service is resumed as soon as possible. The MIM will work with the existing CDS Providers and CSS SPs to coordinate activities to facilitate the resolution of issues.
Process Participants	Switching Service Desk	The CSS SD is responsible for the creation, triage, and escalation of Incidents that are categorised as a Major Incident or identified as having a high impact and urgency on Switching services. Incidents flagged as a Major Incident shall be escalated directly and immediately to the MIM. The Switching SD will monitor and manage the Major Incident from its detection through to its closure.
	CSS Service Provider Existing CDS Provider	The responsibility of the existing CDSs and CSS SPs is to assess and resolve Major Incidents for the services in which they are contracted to provide. Where the root cause of a Major Incidents is not easily identified or where the resolution spans multiple service providers, the service provider shall aid the MIM with the initial triage and impact assessment and will participate in any

Process Role	Responsible Party	Key process responsibilities
		coordinated activities to aid its resolution. The SPs will follow their internal Incident Management process and procedures to resolve Major Incidents within the agreed SLAs and shall notify the Switching Operator MIM when the issue has been resolved.
Process Customer	Market Participants	The MPs are responsible for the identification and raising of incidents to the CSS SD. If the incident is believed to be a Major Incident, the MP should flag it as such and ensure that any Incident raised via the Portal is also immediately followed up with a phone call to the Switching Service Desk to ensure a speedy response. Once the issue has been fixed by the appropriate resolver group and service restored, the MPs will be informed and will update their internal systems and close the incident.
	CSS Service Provider Existing CDS Provider	The existing CDSs and CSS SPs are responsible for the identification and raising of Major Incidents to the Switching SD. The incident will be raised via the CSS SMS and followed up with a phone call to the Switching Service Desk. Once the issue has been resolved by the appropriate resolver group, the service provider will be informed so that they can update their internal systems (where required) and close the incident.

9.3.3 Process Summary

The following diagram shows the high-level Major Incident process.

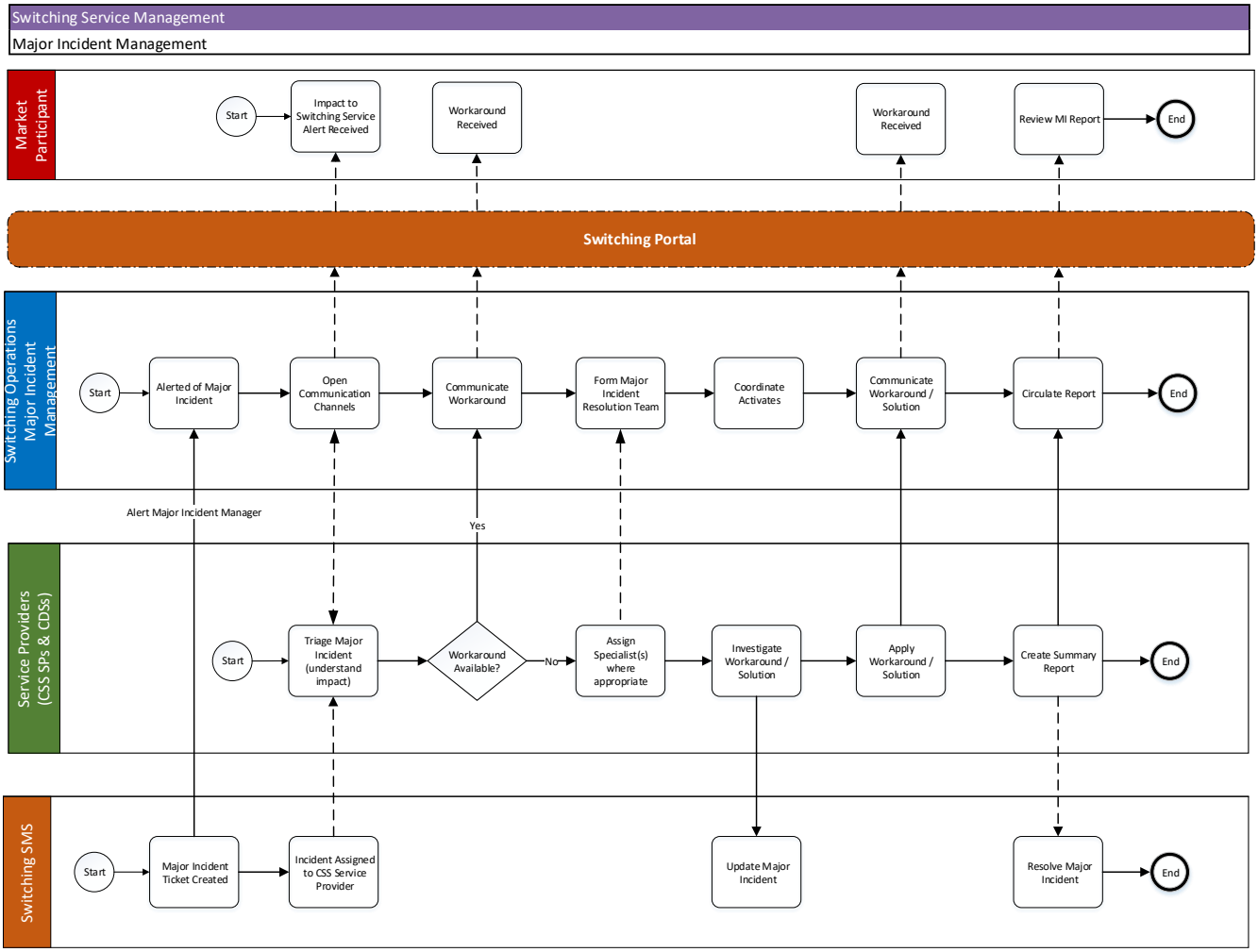


Figure 6 – Major Incident Management

9.3.4 Major Incident Response Targets

On the SMS, any incident can be flagged as a major incident because of its impact on the Switching Service.

The following SLA targets have been allocated to each severity level.

Sev	Description	Target Resolution Time
1	A Category 1 MI which prevents a large group of Market Participants from using Live Services.	4 hours
2	An MI which has a non-critical adverse impact on the activities of participants, but the Live Service is still working at a reduced capacity.	24 hours
3	An MI which has an adverse impact on the activities of a participant, but which can be reduced to a moderate adverse impact due to the availability of a workaround.	72 hours

9.3.5 Process KPIs

The following process KPIs shall be used to measure and assess the effectiveness of the Major Incident Management process:

KPI
Percentage of Major Repeated Incidents;
Percentage of Major Incident escalations;
Percentage of Major Incidents by service;
Average Service Desk response time from time a Major Incident is first reported
Major Incident resolution time;
Percentage of Major Incident resolution within SLA;
Time taken to conduct a Major incident post-Incidence Response /Review;
Time taken to identify a Major Incident;
Time taken to coordinate major incident team response.

9.4 Problem Management

When an Incident is raised, the primary aim is to restore the service as soon as possible.

On many occasions this will result in a workaround being implemented. Where this occurs, a Problem record will also be raised which will be used to monitor the identification, and implementation of a permanent solution.

A Problem record would also be raised if the same incident occurred frequently.

Problem Management identifies and eliminates the underlying causes of an Incident or number of Incidents. It uses a methodology to work with SPs to perform root cause analysis to prevent the recurrence of Incidents and proactively prevents Problems by monitoring any potential service degradation.

The Switching Operator will manage a Problem Management process in cooperation with the Service Providers and Service Users, aligned to the Incident and Major Incident Management processes.

9.4.1 Scope

The scope of the Problem Management process covers:

- Support to Market Participants with any Problem associated with the Switching Service;
- Problem Management coordination between all service providers to ensure the underlying cause is identified and where agreed, a solution created to resolve the Problem.

Whilst only those aspects detailed above are included within the scope of Problem Management, the following exclusions are included to aid reader understanding:

- Management of Problems that are not related to the Switching service;

- Internal Problem Management process and procedures that each service provider shall put in place to identify the underlying cause of Problems found.

9.4.2 Roles & Responsibilities

Process Role	Responsible Party	Key process responsibilities
Process Owner	Switching Operator	The Switching Operator is responsible for defining the Problem Management process and assuring the process meets the Switching service needs.
Process Manager	Switching Operator	The Switching Operator will appoint a Problem Manager who will manage each Problem raised, ensuring that the underlying cause is identified and the appropriate action taken to find a suitable resolution. The Problem Manager will work with the existing CDS Providers and CSS SPs to identify reoccurring Incidents or Incidents that are classed as a Problem. The Knowledge Database shall be populated with all known errors along with their solutions or workarounds.
Process Participants	Switching Service Desk	The Switching SD is responsible for the creation of Problems and the association to related Incidents that are identified or reported by MPs, CDS. The Switching SD will ensure that any identified Problems shall be escalated directly to the Problem Manager.
	CSS Service Provider Existing CDS Provider	The responsibility of the existing CDS Providers and CSS SPs is to assess and identify a permanent solution to reoccurring issues. Where a permanent solution cannot be found or implemented a known error and any identified workarounds shall added to the Knowledge Database until a suitable solution can be found. If the underlying Problem cannot be identified, the existing CDS providers or CSS SPs will follow their internal escalation process and notify the Switching Operator PM when a solution or suitable workaround has been identified.
Process Customer	Market Participants	Switching Market Participants are responsible for the identification and raising incidents to the Switching SD. If the incident is believed to be a recurring issue, the MP should flag it as such. Once the recurring issue has been confirmed the MP will be provided with an associated Problem reference number which will be linked to all related Incidents. The MPs will be notified when the underlying cause of the Incident has been resolved and will update their internal systems and close the incident(s).

Process Role	Responsible Party	Key process responsibilities
	CSS Service Provider Existing CDS Provider	The existing CDSs and CSS SPs are responsible for the identification and raising of Problems to the Switching SD via the CSS SMS. Once an underlying cause has been identified, the service provider will be informed so that they can implement workarounds or where a solution has been found, update their internal systems and close the incident.

9.4.3 Process Summary

The following diagram shows the high-level Problem Management process.

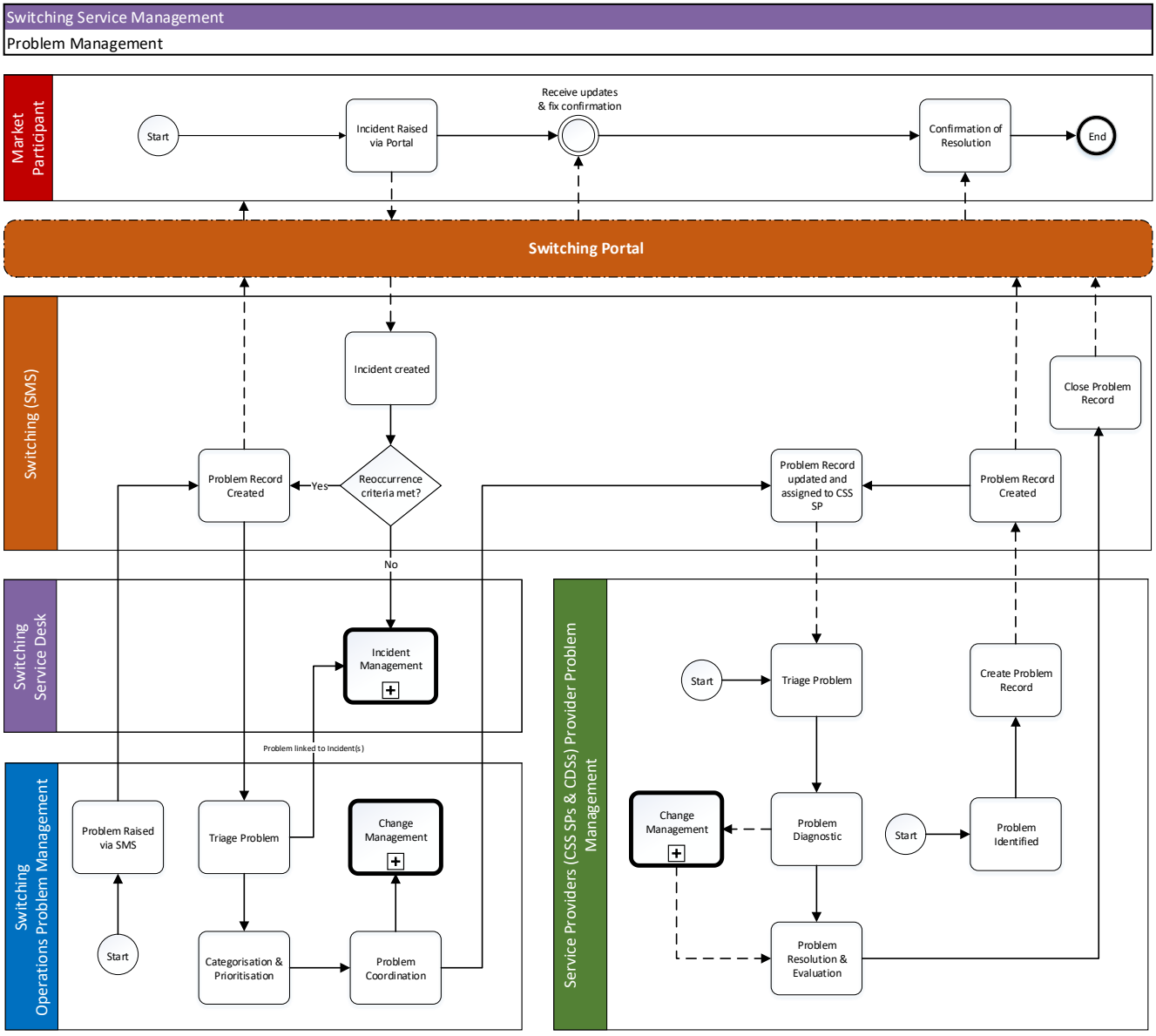


Figure 7 – Problem Management

9.4.4 Process KPIs

The following process KPIs shall be used to measure and assess the effectiveness of the Problem Management process:

KPI
Number of Problems registered by Problem Management;
Number of Incidents linked to a known Problem;
Percentage of unresolved problems due to unknown causes;
Average time for resolving Problems;
Duration of time taken to complete problem diagnosis and identify root cause;
Percentage estimate of Problem resolution success;

9.5 Event Management

9.5.1 Process Summary

Event Management provides the means for the early detection of incidents via events, alerts or notifications. In many cases, it is possible for the incident to be detected and assigned to the appropriate resolver group for action before any actual service outage occurs.

When an event, alert or notification, is triggered, the primary aim of the CDS providers and CSS SPs, is to identify the impact and correctly categorise the event in order to allow the appropriate person or team to respond promptly, thus ensuring the availability and performance of the service is maintained.

Each service provider must maintain its own event management process to identify and manage events and alerts and raise incidents as necessary.

The Switching Operator will manage service affecting events (as Major Incidents), across multiple service providers to ensure alignment to the Incident, Major Incident and Change Management processes.

9.5.2 Scope

The scope of the Event Management process covers:

- Events, alerts and notifications automatically generated by existing CDS or CSS services;
- Events, alerts and notifications are managed by existing CDS or CSS services and met the requirements of the Switching Operator and Switching SD.

Whilst only those aspects detailed above are included within the scope of Event Management, the following exclusions are included to aid reader understanding:

- Setup and configuration of Events, Alerts and Notifications that are not related to the Switching service;

- Internal Event Management process and procedures that each service provider shall put in place to setup, configure, receive and process Events, Alerts and Notifications that are required to monitor systems.

9.5.3 Roles & Responsibilities

Process Role	Responsible Party	Key process responsibilities
Process Owner	CSS Service Provider Existing CDS Provider	The existing CDSs and CSS SPs are responsible for defining the Event Management process and assuring the process meets the Switching service needs.
Process Manager	CSS Service Provider Existing CDS Provider	The Event Management will work with the Switching Operator and Switching SD to identify key aspects of the Service that will require monitoring and assist with the classification of events to form an Events matrix. The Process Manager will ensure that any event, notification or alert triggered is given the appropriate level of response.
Process Participants	CSS Service Provider Existing CDS Provider	The responsibility of the existing CDSs and CSS SPs is to apply (where possible) automated monitoring to services and or systems that need to be controlled. The information captured by such automated monitoring shall be categorised to an agreed event Matrix in order to ensure that Events, Alerts and Notifications are given the appropriate response to ensure normal activities are maintained.
Process Customer	Switching Service Desk	The Switching SD shall be able to view holistically the status and availability of services via a dashboard. The Switching SD are responsible for monitoring the dashboard and identifying outages or degradation of services.
	Switching Operator	The Switching Operator shall be able to receive Events, Alerts or notifications that are required to provide an efficient and reliable service.

9.5.4 Process Summary

The following diagram shows the high-level Event Management process.

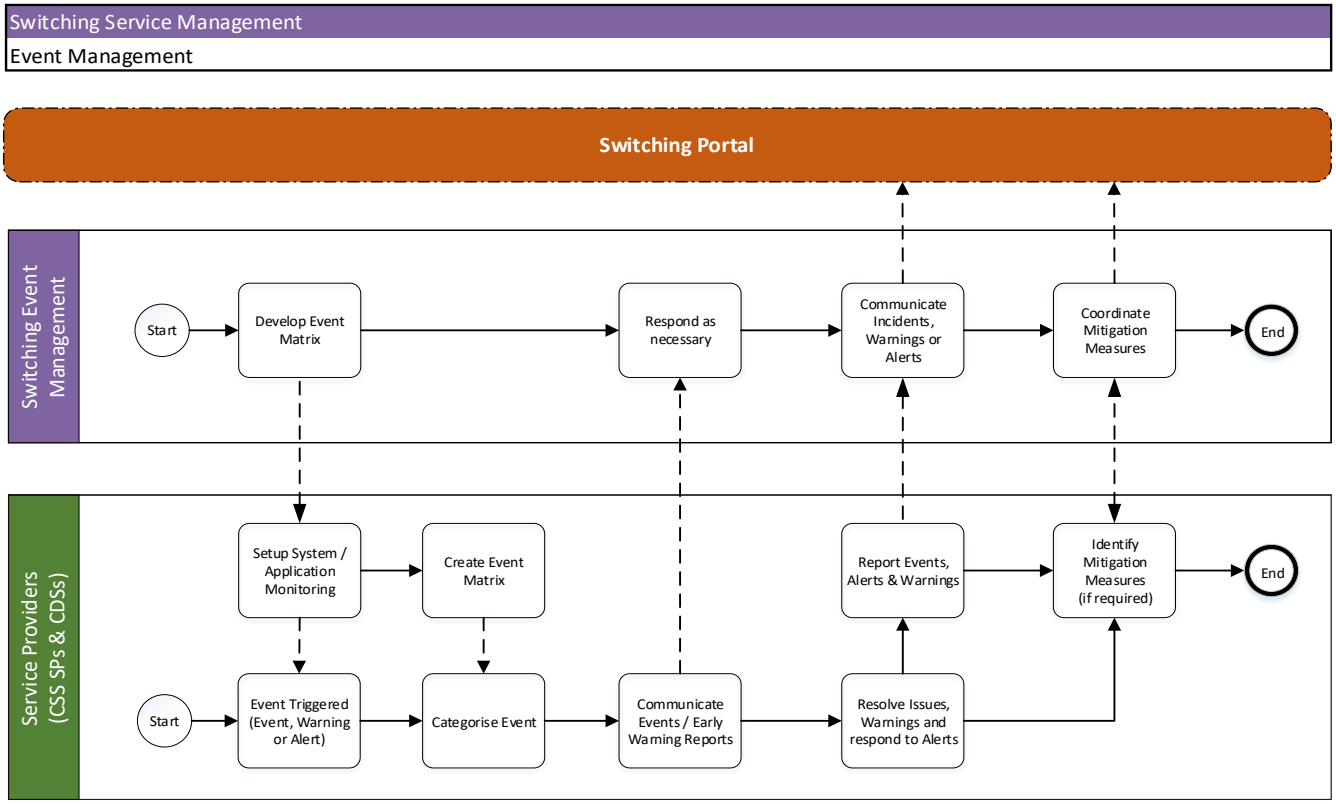


Figure 8 – Event Management

9.5.5 Process KPIs

The following process KPIs shall be used to measure and assess the effectiveness of the Event Management process:

KPI
Percentage of Events resulting in Incidents;
Percentage of Events per Configuration Items;
Percentage of Events identified by monitoring tools;
Total number of Events that become Incidents (or alternately result in Changes).

9.6 Service Request Management

Service Request Management or Request Fulfilment is the process for dealing with user requests for information, advice or for a standard change that is low risk, relatively common and follows a standard procedure. An example of a standard request is a password reset or the setup of a new account to access a system. Service Requests will be received via the Switching SD, using a process similar but separate to that of Incident Management.

The Switching Operator will establish and manage the overall Service Request Management process for the management and fulfilment of Switching Requests.

This will be co-ordinated with the processes of existing providers of CDSs and CSS SPs.

The process ensures that all Service Requests are fulfilled by the first line Switching SD (if possible) or the second/third line SP support teams as appropriate. Progress of Service Requests through to resolution and closure will be monitored and reported on, to provide feedback on progress to market participants.

The Switching SD will work with the existing providers of CDSs and CSS SPs to manage and fulfil Service Requests. All CSS SPs and existing CDS Providers where applicable shall provide access or required capabilities to systems in order for the Switching SD to fulfil Service Requests raised via the CSS SMS.

9.6.1 Scope

The scope of the Request Management process covers:

- Support to Market Participants with any Request that is made for services associated with the Switching Service;
- Request Management and fulfilment coordination to all service providers.

Whilst only those aspects detailed above are included within the scope of Incident Management, the following exclusions are included to aid reader understanding:

- Management of Requests that are not related to the Switching service;
- Internal Request Management process and procedures that each service provider shall put in place to fulfil Service Requests.

9.6.2 Roles & Responsibilities

Process Role	Responsible Party	Key process responsibilities
Process Owner	Switching Operator	The Switching Operator is responsible for defining the Request Management process and assuring the process meets the Switching service needs.
Process Manager	Switching Service Desk	The Switching SD is responsible for managing all aspects of the Request Management process and lifecycle reporting of Request metrics to the Switching Operator.
Process Participants	Switching Service Desk	The Switching SD is responsible for the logging, triage, escalation and fulfilment of Service Requests that are reported by the MPs, existing CDSs or CSS SPs. The Switching SD will monitor the Service Request through from its creation to fulfilment.
	CSS Service Provider Existing CDS Provider	The responsibility of the existing CDSs and CSS SPs is to assess and resolve Service Requests that cannot be fulfilled within the Switching SD. If the Service Request cannot be resolved at 1st line, the assigned 2nd line support will follow their internal escalation process and notify the Switching SD of progress towards resolution and when the Request has been fulfilled.

Process Role	Responsible Party	Key process responsibilities
Process Customer	Market Participants	MPs are responsible for the identification and raising of Service Requests to the Switching SD. The Request will be raised via the Self-Service Portal or, if unavailable, via email or telephone. Once the Service Request has been fulfilled by the appropriate resolver group, the Market Participants will be informed so that they can update their internal systems and close the Service Request.
	CSS Service Provider Existing CDS Provider	Switching SPs are responsible for the identification and raising of Service Requests to the Switching SD. The Service Request will be raised via the CSS SMS, email or telephone. Once the request has been fulfilled by the appropriate resolver group, the Switching SP will be informed so that they can update their internal systems (where required) and close the Service Request.

9.6.3 Process Summary

The following diagram shows the high-level Service Request Management process.

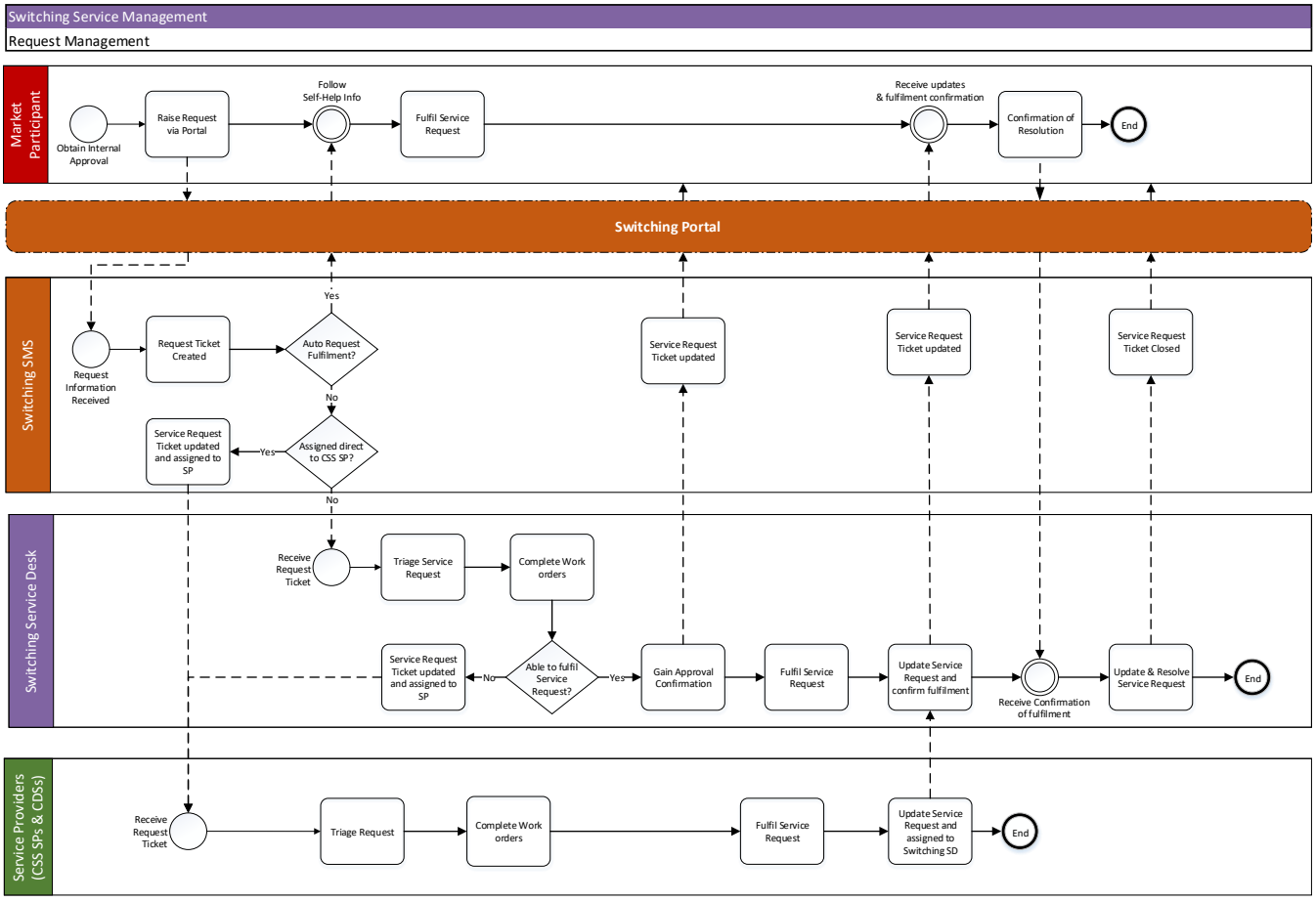


Figure 9 – Service Request Management

9.6.4 Response Targets

Priority	Description	Target Resolution Time
1	**Critical** priority request	Target Fulfilment Time: 24 hours
2	**High** priority request	Target Fulfilment Time: 48 hours
3	**Medium** priority request	Target Fulfilment Time: 3 days
4	**Low** priority request	Target Fulfilment Time: 10 days

9.6.5 Process KPIs

The following process KPIs shall be used to measure and assess the effectiveness of the Service Request Management process:

KPI
Number of Service Requests by service type;
Percentage of first time Request fulfilment (Resolved by SD);
Request fulfilment working duration by resolver group for each type of Request;
Frequency in which tickets move from resolved to active;
Percentage of Requests fulfilled within SLA;
Estimated work effort for Request fulfilment per Request type.

9.7 Access Management

Access Management is the process of granting authorised users the right to use a service, while preventing access to non-authorised users. Access to systems or services can be initiated by a Service Request through the Switching SD.

Access Management ensures that Market participants, CSS SPs and existing providers of CDSs are given the necessary and correct rights to gain access to data or to use a specific service, while preventing access to non-authorised users.

The CSS SPs and existing providers of CDSs will provide Access Management control to ensure that the access granted to their systems or data is authorised and is being properly used. The Switching Operator will ensure alignment with the Information Security and Request Management processes.

9.7.1 Scope

The scope of the Access Management process covers:

- The management, confidentiality, availability and integrity of data and intellectual property for Switching;
- Ensuring Market Participants are given the appropriate right to use a service;

- Monitoring and auditing of system access to detect unauthorised access;
- User onboarding;
- Access Management coordination to all service providers.

Whilst only those aspects detailed above are included within the scope of Incident Management, the following exclusions are included to aid reader understanding:

- The management, confidentiality, availability and integrity of data and intellectual property that are not related to the Switching service;
- Internal Access Management process and procedures that each service provider shall put in place to fulfil Access Management requirements.

9.7.2 Roles & Responsibilities

Process Role	Responsible Party	Key process responsibilities
Process Owner	Switching Operator	The Switching Operator is responsible for defining the Access Management process and assuring the process meets the Switching service needs.
Process Manager	Switching Operator CSS Service Provider Existing CDS Provider	The Switching Operator, existing CDS Providers and CSS SPs are responsible for managing all aspects of their Access Management process and will work with the each other to ensure that access to services and data is only granted when sufficient authorisation has been received.
Process Participants	Switching Operator CSS Service Provider Existing CDS Provider	The responsibility of the Switching Operator, existing CDS Providers and CSS SPs is to ensure that the rights that have been provided are being properly used, detect any unauthorised access and restrict access where necessary. It is also responsible assess, authorise and resolve Access Service requests that cannot be fulfilled within the Switching SD.
Process Customer	Market Participants	Market Participants are responsible for requesting access to Switching services or data for which they believe are authorised to use. Such a request will be made by creating a Service Request via the Self-Service Portal (the Portal), or if unavailable, via email or telephone. Once the access Service Request has been authorised, the Market Participants will be informed so that they can update their internal systems and close the Service Request.

9.7.3 Process Summary

The following diagram shows the high-level Access Management process.

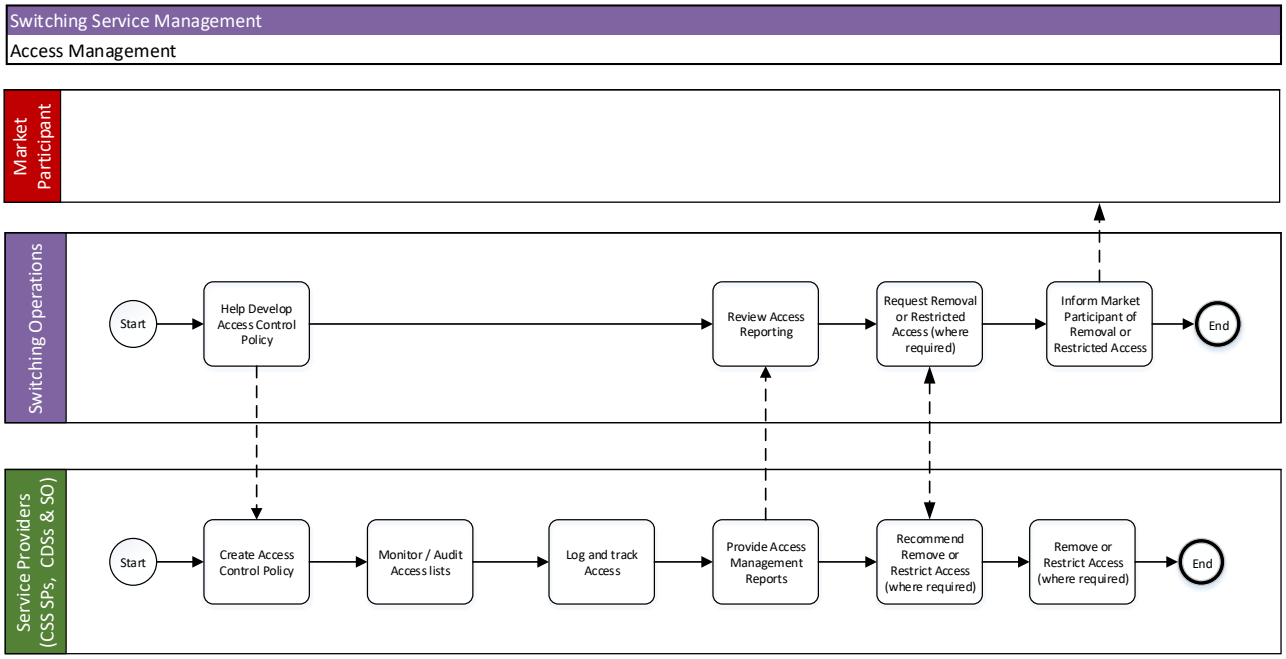


Figure 10 – Access Management

9.7.4 Process KPIs

The following process KPIs shall be used to measure and assess the effectiveness of the Access Management process:

KPI
Number of Access requests received;
Percentage of Password reset volumes per month;
Percentage of new accounts provisioned;
Percentage of verification of Access requests received;
Percentage of Access rights provided;
Percentage of Access rights removed or restricted.

9.8 Service Measurement

Service Measurement is used to demonstrate if a process, service or system is achieving the defined objectives in an effective and efficient way. This is accomplished through the definition of Critical Success Factors (CSFs), which support the defined objectives of each process. A CSF is something that must happen in order for a process to be successful.

Each CSF should have Key Performance Indicators (KPIs) defined that are used to measure the success against the associated CSF.

The existing providers of CDSs and CSS SPs shall ensure that data required to measure against the agreed KPIs for their service(s) is captured and provided on a regular basis.

The Switching Operator will establish and manage the overall Service Measurement process to ensure that the data required to measure the performance of the Switching Service is captured and provided on a regular basis. This will be co-ordinated with the Service Measurement processes of existing providers of CDSs and CSS SPs and the Continuous Service Improvement activities.

9.8.1 Scope

The scope of the Service Measurement process covers:

- The definition of Critical Success Factors (CSF) and associated Key Performance Indicators (KPI), to measure the success of Switching Service(s);
- Ensure that Market Participants capture thev required data to measure the success of Switching Service(s);
- The Service Measurement coordination and collation of KPI reports to measure the Switching service.

Whilst only those aspects detailed above are included within the scope of Service Measurement, the following exclusions are included to aid reader understanding:

- The measurement of services that are not related to the Switching service;
- Internal service measurement process and procedures that each service provider shall put in place to fulfil Service Measurement requirements
- Customer satisfaction as this will be provided as part of a wider Customer Experience piece by the Switching Operator.

9.8.2 Roles & Responsibilities

Process Role	Responsible Party	Key process responsibilities
Process Owner	Switching Operator	The Switching Operator is responsible for defining the Service Measurement process and assuring the process meets the Switching service needs.
Process Manager	Switching Operator	The Switching Operator will work with the existing CDS Providers and CSS SPs to set Critical Success Factors and Key Performance Indicators to provide the ability to measure service performance.
Process Participants	Switching Service Desk	The Switching SD is responsible for the detail and accuracy of the data they capture within the Switching Service Management System.
	CSS Service Provider Existing CDS Provider	The responsibility of the CDSs and SPs is to ensure that the services and systems are able to capture data in order to measure the performance of their systems and services. The service providers will also be

Process Role	Responsible Party	Key process responsibilities
		responsible for ensuring that performance reports are generated and provided to the agreed timescales.
	Market Participant	Market Participants are responsible for completing customer surveys and to provide constructive feedback on services consumed in order to measure the service performance and to aid in their continual improvement.
	Regulatory Parties	Regulatory Parties are responsible for providing feedback / comments on services consumed by the Market Participants in order to measure the service performance and to aid in their continual improvement.
Process Customer	Switching Operator	The Switching Operator is responsible for the data captured from each service provider which will be used to produce an end to end view of the performance of the Switching Service. Data captured will be sent to interested parties to identify areas of improvement or failures in service.

9.8.3 Process Summary

The following diagram shows the high-level Service Measurement process.

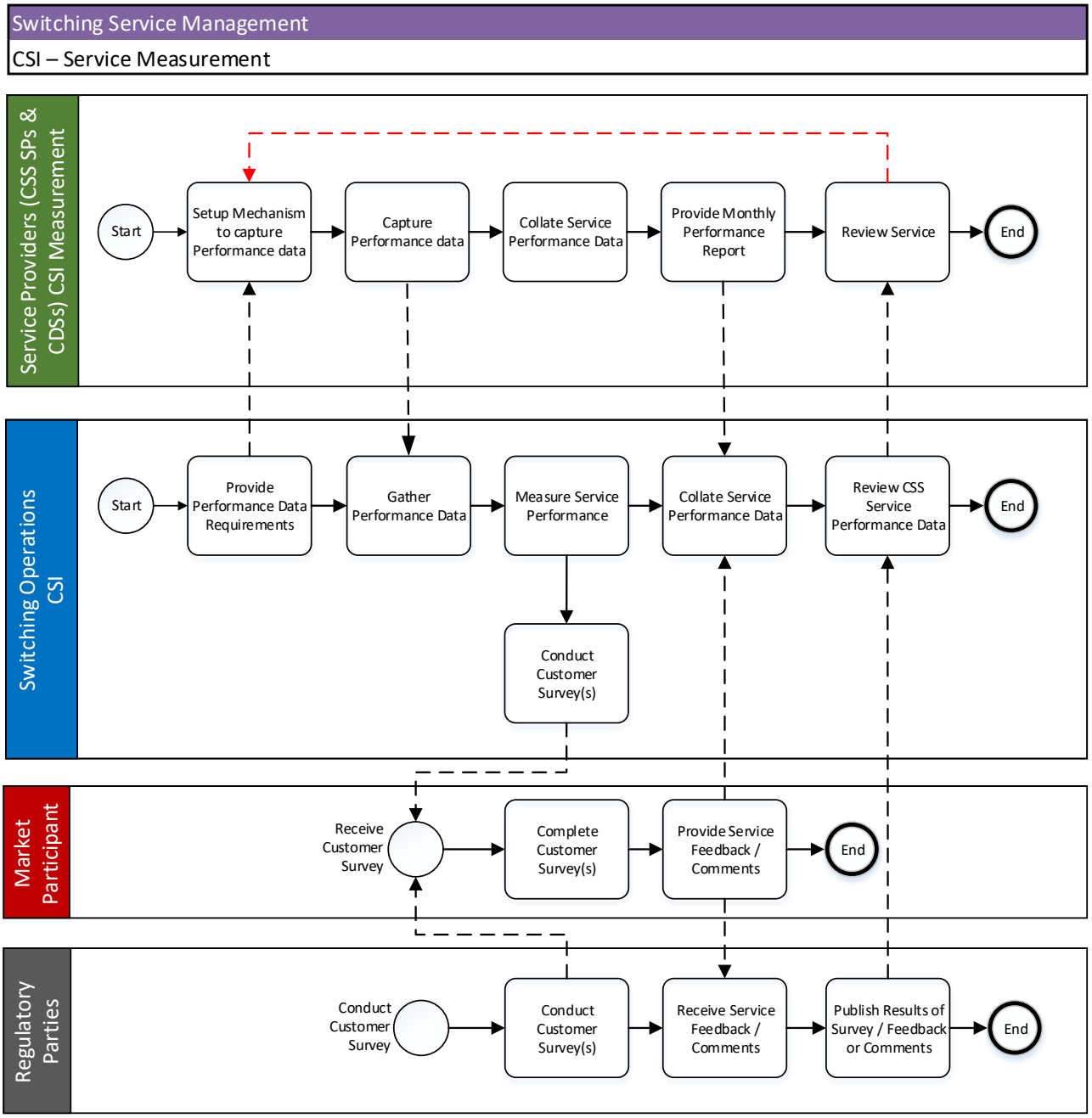


Figure 11 – Service Measurement

9.8.4 Process KPIs

The following process KPIs shall be used to measure and assess the effectiveness of the Service Measurement process:

KPI
Number of customer satisfaction surveys issued;
Percentage of customer satisfaction surveys completed;
Number of service performance reports issued outside of agreed timescales.

9.8.5 KPI Information

The following KPIs are a sample of those that will be used to measure the performance of service providers.

KPI areas
Availability of Services relative to the availability agreed in SLAs and OLAs;
Number of service interruptions during a defined period;
Average duration of service interruptions during the period;
Number of major changes during the period;
Number of Emergency Changes implemented during the period;
Number of incidents registered by the Service Desk in the period by severity;
Number of escalations in the period for Incidents not resolved in the agreed resolution time;
Average time taken during the period between the time a user reports an Incident and the time that the Service Desk responds;
Average time for resolving an incident, by severity;
Rate of incidents resolved within SLA during the period.

9.9 Continual Service Improvement

The objective of the Continual Service Improvement process is to identify and define specific initiatives aimed at improving services and processes, based on the results of service measurement, reviews and process evaluations. The resulting initiatives are either internal initiatives pursued by the service provider on its own behalf, or initiatives which require Switching Operator coordination.

The existing providers of CDSs and CSS SPs will look for ways to improve their service(s) or process effectiveness, efficiency and cost effectiveness. Areas that are identified as improvement opportunities will be collated and presented at quarterly strategy meetings.

The Switching Operator will establish and manage the overall Continual Service Improvement process to ensure that the data captured to measure performance of the success or failures of Services are used to continually align and re-align services to the changing business needs. Co-ordination with the Service Measurement processes of existing providers of CDSs and CSS SPs will enable the identification and implementation of improvements to services and systems that support Switching processes.

Improvements that require changes to REC or the wider industry will be escalated to the REC Panel along with any unresolved disputes between existing service providers.

9.9.1 Scope

The scope of the Continual Service Improvement process covers:

- The definition of initiatives aimed at improving services and processes, based on the results of service reviews and process evaluations;
- Managing and coordinating improvements to Service Management processes and services;

- Continually measuring the performance of service providers and design improvements to processes, services and infrastructure to increase efficiency, effectiveness, and cost effectiveness;
- Verifying if improvement initiatives are proceeding according to plan, and introduce corrective measures where necessary.

Whilst only those aspects detailed above are included within the scope of Continual Service Improvement, the following exclusions are included to aid reader understanding:

- The Continual Improvement of services that are not related to Switching services;
- Internal process and procedures that each service provider shall put in place to fulfil the Continual Service Improvement requirements.

9.9.2 Roles & Responsibilities

Process Role	Responsible Party	Key process responsibilities
Process Owner	Switching Operator	The Switching Operator is responsible for defining the E2E Continual Service Improvement process and for assuring the process meets the Switching service needs.
Process Manager	Switching Operator	The Switching Operator will work with the existing CDS Providers and CSS SPs to define initiatives to improve services and processes.
Process Participants	CSS Service Provider Existing CDS Provider	The responsibility of the existing CDS providers and CSS SPs is to proactively seek opportunities to improve the way their services are delivered. The service providers will also be responsible for implementing agreed improvement initiatives.
Process Customer	Switching Operator	The Switching Operator is responsible for arranging strategy meetings, defining, documenting and reporting on the Continual Improvement of services that are made by each service provider.

9.9.3 Process Summary

The following diagram shows the high-level Continual Service Improvement process.

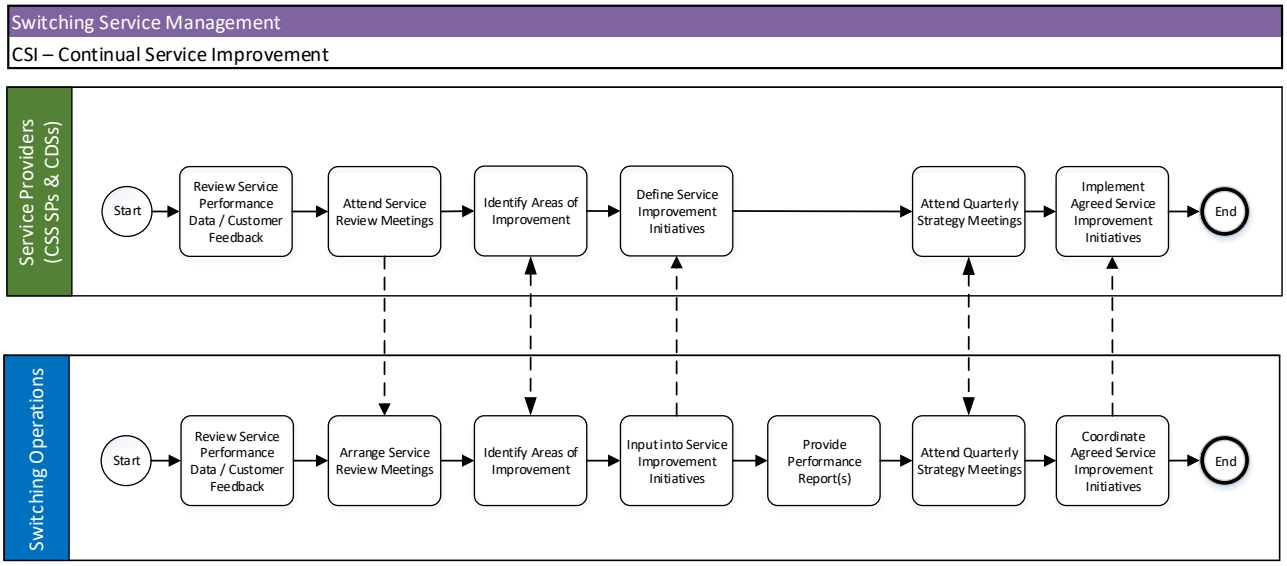


Figure 12 – Continual Service Improvement

9.9.4 Process KPIs

The following process KPIs shall be used to measure and assess the effectiveness of the Continual Service Improvement process:

KPI
Number of Continual Service Improvement Initiatives identified;
Percentage of Continual Service Improvement Initiatives agreed.

9.10 Service Reporting

Service Reporting reports on the results achieved both operationally and strategically using information gathered from Service Measurement. It also reports on any developments related to Service Level Agreements such as hitting various targets and key performance indicators. Its purpose will be to provide Switching Service Management information to Switching Operations, service providers and other interested parties in order for informed decisions to be made.

The Switching Operator will establish and manage the overall Service Reporting process and the format and style of reports to suit the relevant audiences will be co-ordinated with the Service Reporting processes of existing providers of CDSs and CSS SPs.

9.10.1 Scope

The scope of the Service Reporting process covers:

- The reporting on service performance against KPIs;
- The reporting of the results and findings from **service reviews;**
- The reporting on agreed improvement initiatives;
- The reporting on the success/failure of improvement initiatives.

Whilst only those aspects detailed above are included within the scope of Service Reporting, the following exclusions are included to aid reader understanding:

- The reporting for services that are not related to Switching services;
- Internal process and procedures that each service provider shall put in place to fulfil the Service Reporting requirements.

9.10.2 Roles & Responsibilities

Process Role	Responsible Party	Key process responsibilities
Process Owner	Switching Operator	The Switching Operator is responsible for defining the Service Reporting process and assuring the process meets the Switching service needs.
Process Manager	Switching Operator	The Switching Operator will work with the existing CDS Providers and CSS SPs to collate data to report on the performance of end to end switching.
Process Participants	CSS Service Provider Existing CDS Provider	The responsibility of the existing CDS providers and CSS SPs is to collect and provide performance data to an agreed schedule.
Process Customer	Switching Operator	The Switching Operator is responsible for the collation and provision of Switching performance reports that are to be issued to interested parties.

9.10.3 Process Summary

The following diagram shows the high-level **Service Reporting** process.

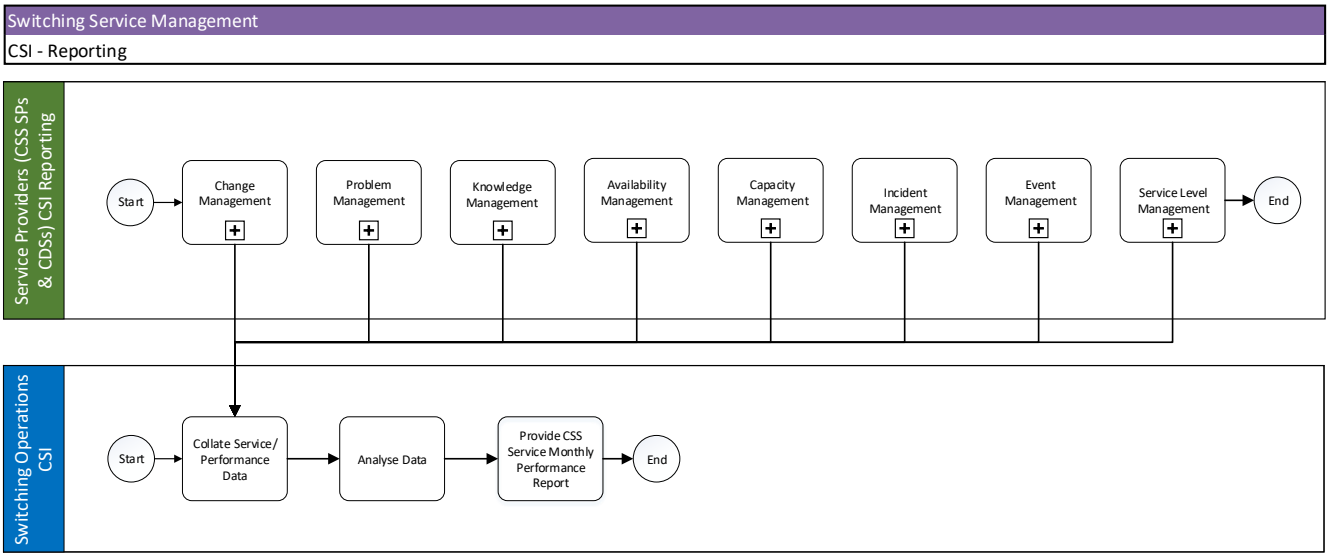


Figure 13 – Service Reporting

9.10.4 Process KPIs

The following process KPIs shall be used to measure and assess the effectiveness of the Service Reporting process:

KPI
Number of requests made for data not issued in a report;
Number of daily generated reports issued;
Number of weekly generated reports issued;
Number of monthly generated reports issued;
Number of annual generated reports issued;
Number of ad-hoc generated reports issued;

9.11 Change Management

The aim of the Change Management Process is to provide a mechanism to govern and coordinate the implementation of changes that is responsive to the needs of Switching Operations, CSS providers, existing providers of CDSs and Market Participants. The Change Management goal is to identify and prioritise changes, to manage the implementation, to minimise the impact on the CSS of those changes and to deliver agreed levels of service.

Existing providers of CDSs and CSS SPs will be responsible for notifying the Switching Operator of any changes to CSS or CDS Service(s) that are under their control and shall submit a forward schedule of change highlighting the agreed and planned changes. All Requests for Change (RFC) that will or could have an impact on the Switching service shall be assessed by the Switching Operators Change Advisory Board (CAB) to understand the impact and to highlight any required changes that need to be made to affected SP services or systems. Changes that require changes to REC or the wider industry will be escalated to the REC Panel along with any unresolved disputes between existing service providers.

The Switching Operator will be responsible for the coordination of changes that span multiple service providers and for the collation of each SPs schedule into a single end to end schedule of CSS change. This will be used to identify potential conflicts and will feed into the Switching Service Availability plan.

Operational Change will be logged and managed in the CSS SMS enabling a consistent approach between Operational Change and Contract and Common Change Processes as well as enabling the Switching Operator to monitor and report on all Operational Changes.

9.11.1 Normal Change

Normal Change means any Change that may affect one or more of the existing providers of CDSs or CSS SPs will be subject to Switching Operator's authorisation. Note that this only applies to services that are within the scope of Switching.

As this type of change may affect one or more of the Switching Services and have a negative impact on one or more Service Providers these should be classified as Normal changes and would need to be taken to the Change Advisory board for evaluation and approval.

9.11.2 Standard Change

Standard Changes (including System maintenance) are changes that should improve the operational efficiency of services. Typically, these changes should involve internal Service Provider changes that:

- Have been pre-approved;
- Do not have a negative impact on CSS SPs or existing providers of CDSs services;
- Will not impact multiple Service Providers;
- Do not impact CSS or CDS mandatory services;
- Do not have a negative impact on costs.

Standard changes will not be subject to Switching Operators authorisation governance; however, an RFC must be submitted to Switching Operator's Change Management for visibility and audit purposes.

9.11.3 Emergency Change

An Emergency Change is a Change that must be implemented as soon as possible, for example, to resolve a major Incident or implement a security patch. This type of Change is not planned but is still subject to Switching Operators authorisation governance but must be expedited faster than a normal change.

9.11.4 Forward Schedule of Change

The existing providers of CDSs and the CSS SPs shall maintain and provide a forward schedule of change that contains normal changes, standard and any planned maintenance activities. The forward schedule of change shall be provided to the Switching Operator on a monthly basis for the forthcoming monthly service period.

An end to end forward schedule of change will be maintained by the Switching Operator who will published it at least 1 month prior to the change maintenance window.

9.11.5 Scope

The scope of the Change Management process covers:

- The approval mechanism of changes that have an impact on existing CDS providers and CSS SPs service and processes in relation to Switching;
- The collation and provision of a forward schedule of change;
- The coordination of authorised changes that span multiple providers; and
- The implementation of Modifications approved by the REC Panel.

Whilst only those aspects detailed above are included within the scope of Change Management, the following exclusions are included to aid reader understanding:

- Changes to service and processes that are not related to the Switching service.
- Internal Change Management process and procedures that each service provider shall put in place to identify, approve, implement and report on required changes.
- Provision of information as requested by the REC Panel (or any of its sub-committees) to support the assessment of Modifications to the REC

9.11.6 Roles & Responsibilities

Process Role	Responsible Party	Key process responsibilities
Process Owner	Switching Operator	The Switching Operator is responsible for defining the Change Management process and assuring the process meets the Switching service needs.
Process Manager	Switching Operator	The Switching Operators Change Manager shall ensure that its Service Change Management process is aligned to the existing CDS provider and CSS SPs and will be responsible for publishing the FOC and arranging CAB and ECABs where necessary.
Process Participants	CSS Service Provider Existing CDS Provider	The existing CDS providers and CSS SPs will be responsible for the creation and maintenance of a robust Change Management Process that is able to manage changes of their systems, processes and services. This must be aligned to the Switching Operator Change Management process.
Process Customer	Switching Operator CSS Service Provider Existing CDS Provider	All Changes shall be raised on the Service Management System and where required to, attend CAB meetings to gain approval of or provide change impact assessments. The Switching Operator and service providers shall recommend improvements to ensure that amendments to services, processes and systems are completed efficiently with minimal disruption.

9.11.7 Process Summary

The following diagram shows the high-level Change Management process.

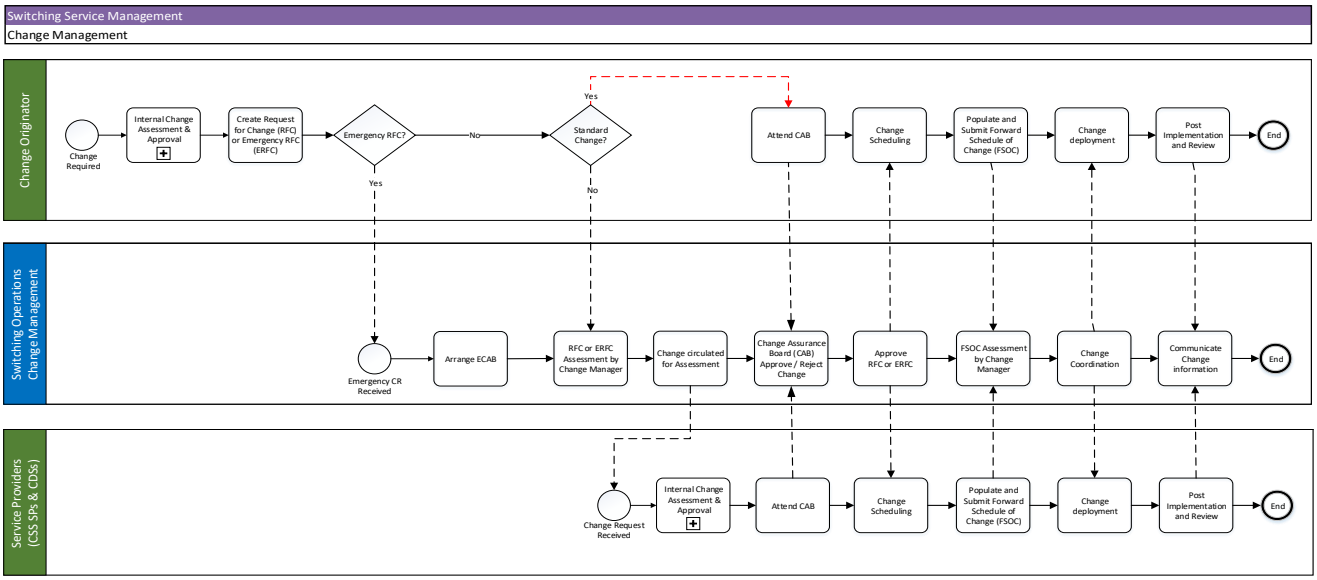


Figure 14 – Change Management

9.11.8 Process KPIs

The following process KPIs shall be used to measure and assess the effectiveness of the Change Management process:

KPI
Number of Changes submitted;
Number of major assessed by the Switching Change Advisory Board;
Number of CAB (Change Advisory Board) meetings held;
Average duration for registering an Request For Change (RFC) with Change Management until a decision on the RFC is reached (i.e. until it is either approved or rejected)
Number of rejected RFCs by the Switching Change Advisory Board;
Number of Emergency Changes by the ECAB (Emergency Change Advisory Board).

9.12 Supplier Management

The objective of Supplier Management is to ensure that all contracts with service providers support the needs of the Service(s). This ITIL process is also responsible for making sure that all suppliers and service providers meet their contractual commitments.

The Switching Operator has the following objectives:

- Providing the Supplier Management Framework;
- Evaluation of new Suppliers and Contracts;
- Establishing new Suppliers and Contracts;
- Processing of Standard Orders;
- Contract Renewal or Termination;
- Establishing Escalation and Dispute processes.

The existing providers of CDSs and the CSS SPs shall maintain up to date records of all contracts relating to the services provided, as well any Switching-related sub-contractor contracts. The SP shall monitor and report on its subcontractors to ensure their performance against agreed SLAs are met.

9.12.1 Scope

The scope of the Supplier Management process covers:

- Ensures that all contracts with CSS suppliers and service providers support the needs of Switching service(s);
- The responsibilities for making sure that all suppliers and service providers meet their contractual commitments**.**

Whilst only those aspects detailed above are included within the scope of Supplier Management, the following exclusions are included to aid reader understanding:

- The management of suppliers and service providers that are not related to Switching services;

- Internal process and procedures that each service provider shall put in place to fulfil the supplier requirements.

9.12.2 Roles & Responsibilities

Process Role	Responsible Party	Key process responsibilities
Process Owner	Switching Operator	The Switching Operator is responsible for defining the Supplier Management process and assuring the process meets the Switching service needs.
Process Manager	Switching Operator	The Switching Operator will ensure the required CSS Service provider contracts are in place, are fit for purpose and meet the agreed service levels.
Process Participants	CSS Service Provider Existing CDS Provider	The existing CDS providers and CSS SPs must ensure they meet their contractual agreements and manage any subcontractor contracts to ensure they meet their agreed SLA.
Process Customer	Switching Operator	The Switching Operator shall meet with the service providers on a regular basis (with the frequency determined for each service provider) to ensure that the service(s) provided and the contract(s) in place meet the needs of Switching.

9.12.3 Process Summary

The following diagram shows the high-level Supplier Management process.

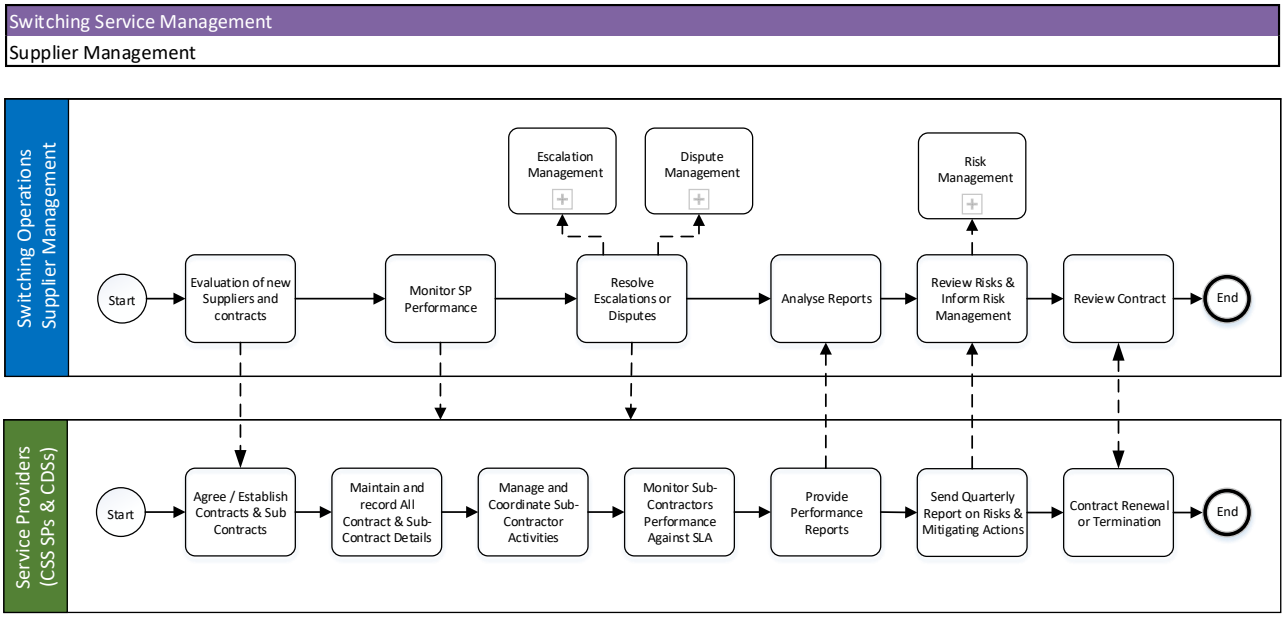


Figure 15 – Supplier Management

9.12.4 Process KPIs

The following process KPIs shall be used to measure and assess the effectiveness of the Supplier Management process:

KPI
Number of conducted contract and supplier reviews;
Number of identified contract / obligation breaches which were not fulfilled by suppliers.

9.13 Asset and Configuration Management

Asset and Configuration Management aims to maintain information about Configuration Items (CIs) required to deliver an IT service, including their interrelationships.

The existing providers of CDSs and CSS SPs shall create and maintain an Asset and Configuration Management database (CMDB), so that it is able to hold all information on CIs. This includes specifying the attributes describing CI types and their sub-components, as well as determining their interrelationships. The CDS and CSS SPs shall also perform regular checks, ensuring that the information contained in the CMDB is an exact representation of the CIs actually installed in production environments.

The Switching Operator is mainly concerned with reviewing modifications or changes to the assets and configuration items, to make sure that any changes to an asset or CI does not have an adverse effect on interrelated services or systems. The Switching Operator will be responsible for ensuring that the Asset and Configuration Management process is aligned to the Change and Release Management processes to ensure that no unauthorised changes occur.

9.13.1 Scope

The scope of the Asset and Configuration Management process covers:

- Ensuring all Asset and Configuration Items are recorded in a database and maintained to support the needs of Switching service(s);
- The responsibilities for making sure that changes to assets and configurations are reviewed, authorised and recorded.

Whilst only those aspects detailed above are included within the scope of Asset and Configuration Management, the following exclusions are included to aid reader understanding:

- The Asset and Configuration Management of items that are not related to Switching services;
- Internal process and procedures that each service provider shall put in place to fulfil the Asset and Configuration Management requirements.

9.13.2 Roles & Responsibilities

Process Role	Responsible Party	Key process responsibilities
Process Owner	Switching Operator	The Switching Operator is responsible for defining the Asset and Configuration Management process and

Process Role	Responsible Party	Key process responsibilities
		assuring the process meets the Switching service needs.
Process Manager	CSS Service Provider Existing CDS Provider	The existing CDS providers and CSS SPs shall create and maintain an up to date Asset and Configuration database to make sure it holds the configuration items and their interrelationships.
Process Participants	CSS Service Provider Existing CDS Provider	Asset and Configuration reports shall be provided to the Switching Operator every quarter or after a change has been authorised and made.
Process Customer	Switching Operator	The Switching operator is responsible for gathering and collating configuration item interrelationships which will be used to understand the impact of any submitted Changes that could affect existing CDS providers and CSS SPs services.

9.13.3 Process Summary

The following diagram shows the high-level Asset and Configuration process.

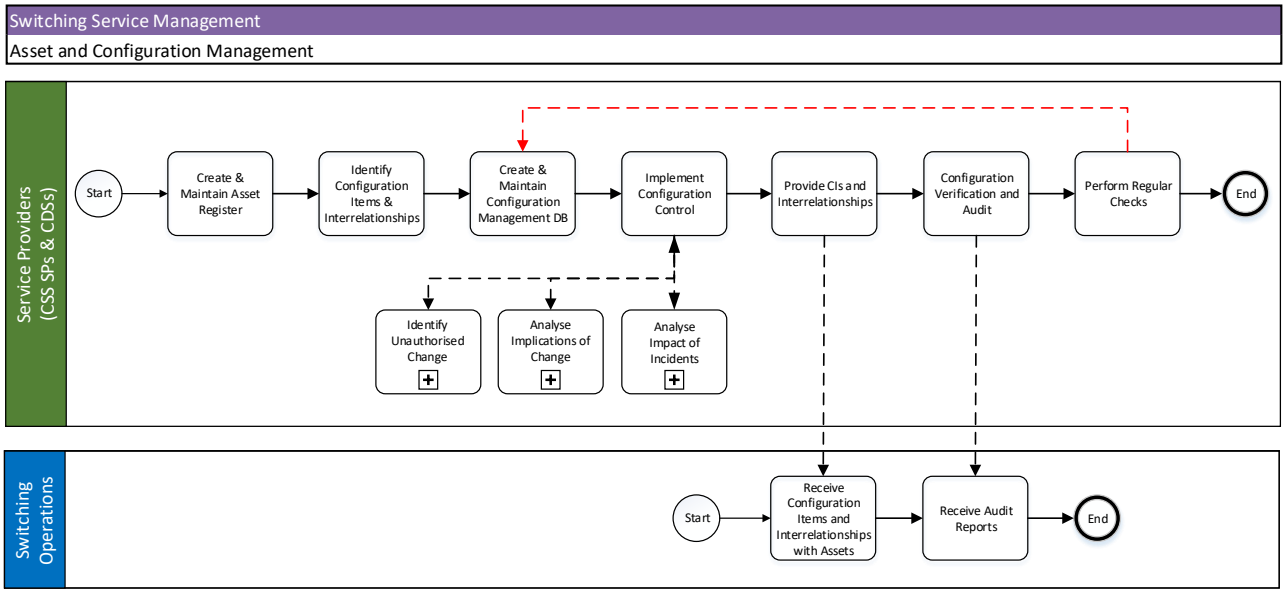


Figure 16 – Asset and Configuration Management

9.13.4 Process KPIs

The following process KPIs shall be used to measure and assess the effectiveness of the Asset and Configuration process:

KPI

Number of Incidents reported where the underlying cause of the Incident is the result of inaccurate Configuration Management information;
Number of Configuration Items for which data is kept in the database;
Number of unauthorised changes identified as a result of audits performed;
Number of errors found in the CMS as a result of an audit.

9.14 Knowledge Management

The Knowledge Management Process is responsible for gathering, analysing, storing and sharing knowledge information. The aim of Knowledge Management is to ensure that Market Participants, existing providers of CDSs and CSS SPs have easy to use access to the required information related to CDS and CSS services at the required point.

The Switching Operator shall ensure that there is a clearly documented process for the creation, maintenance, audit, update and removal of Knowledge Management artefacts. This shall be developed in collaboration with the existing providers of CDSs and CSS SPs, by developing and utilising Knowledge Management within the CSS SMS.

Knowledge Management will comprise of (Service Desk) knowledge based tools/scripting as well as static knowledge resources, such as documents, and knowledge drives the use of interactive tools for diagnosis and potential remediation.

The existing providers of CDSs and CSS SPs are required to identify, create and deliver regular training as reasonably requested by the Switching Operator, produce knowledge and self-help materials, including FAQs to enable the Switching Operator's SM function to establish and maintain an effective service.

9.14.1 Scope

The scope of the Knowledge Management process covers:

- The collection and provision of up to date self-help data that is to be used as self-help information for Switching SD, Switching Operations and Switching Market participants;
- The responsibilities for making sure that all self-help information is current and maintained
- The publishing of self-help information on the portal for Market Participants to use to resolve known issues**.**

Whilst only those aspects detailed above are included within the scope of Knowledge Management, the following exclusions are included to aid reader understanding:

- The Knowledge and self-help information that are not related to Switching services;
- Internal process and procedures that each service provider shall put in place to fulfil the Knowledge Management requirements.

9.14.2 Roles & Responsibilities

Process Role	Responsible Party	Key process responsibilities
Process Owner	Switching Operator	The Switching Operator is responsible for defining the Knowledge Management process and assuring the process meets the Switching service needs.

Process Role	Responsible Party	Key process responsibilities
Process Manager	Switching Operator	The Switching Operator shall review Knowledge Categories and Knowledge Articles jointly with the market participants, CDS and CSS SPs on a regular, scheduled basis, which shall also involve approving and publishing new Knowledge Categories and Knowledge Articles. Where Knowledge Articles are published for the first time or where updates to Knowledge Articles have been made, the Knowledge Manager is accountable for sending out appropriate communications to the Knowledge Article users.
Process Participants	CSS Service Provider Existing CDS Provider	The CDS and CSS Service Providers Knowledge Managers shall ensure that all Knowledge Articles or self-help articles will be continually maintained, accurate and up-to-date and will be subject to regular review to ensure that it is not retained or distributed unnecessarily.
Process Customer	Switching SD	The Switching Service Desk will be required to use the Knowledge articles and encourage the use of self-help information to resolve Incidents and Service Requests. Feedback on the effectiveness and use of the Knowledge articles shall be provided to ensure the continuous improvement.
	Market Participant	Market Participants will be encouraged to pass feedback on Knowledge Articles back to the Switching Operator when those Knowledge Articles are perceived to have gaps, be incomplete or over complicated. This feedback may be used by the Switching Operators Knowledge Manager to improve Knowledge Articles.

9.14.3 Process Summary

The following diagram shows the high-level Knowledge Management process.

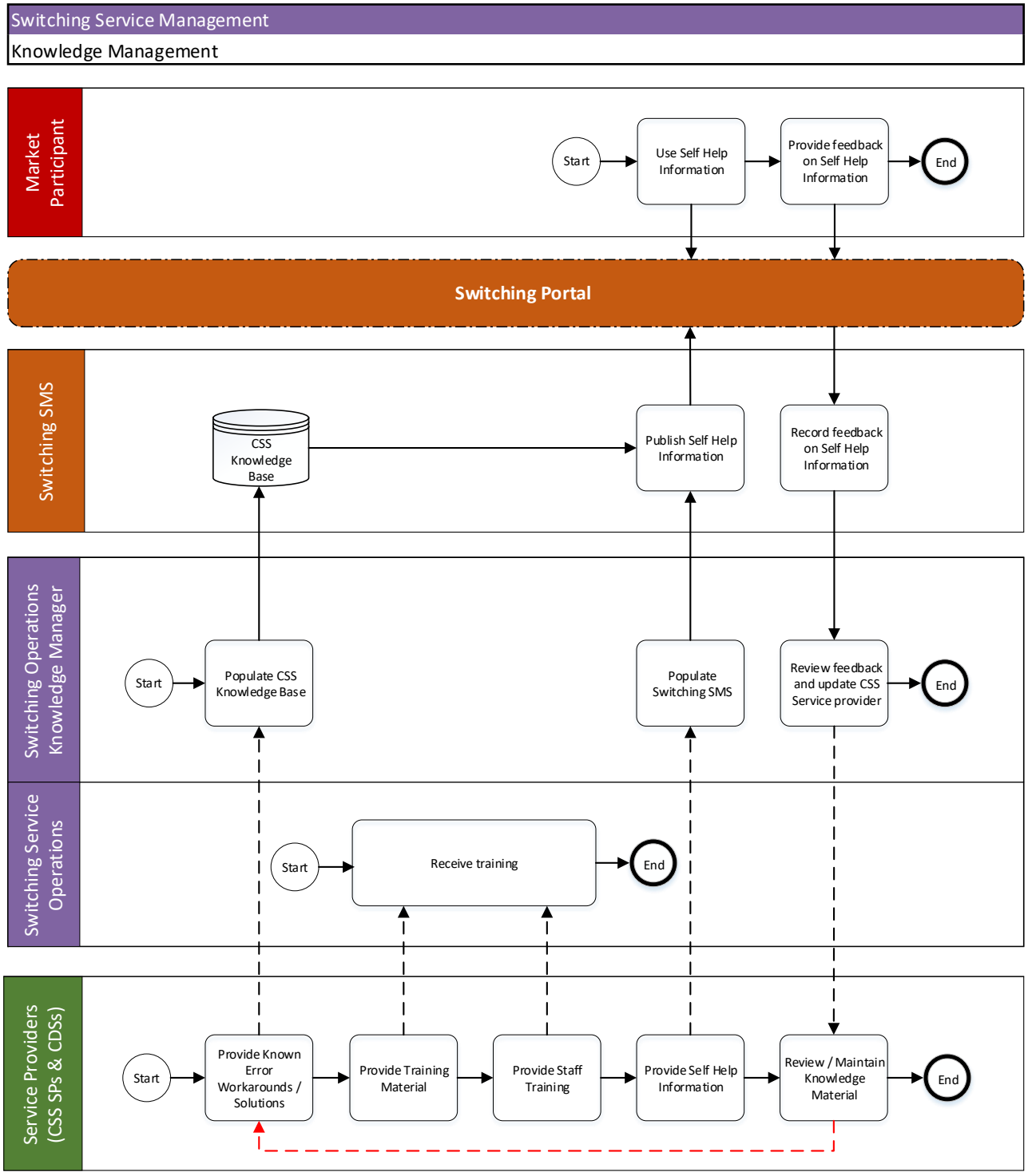


Figure 17 – Knowledge Management

9.14.4 Process KPIs

The following process KPIs shall be used to measure and assess the effectiveness of the Knowledge Management process:

KPI
Number of Knowledgebase Articles available for each service;
Percentage of Knowledgebase Articles updates within the last 3 months;
Percentage of ticket resolution using Self Help Information;
Number of times an article is used;
Quality of Knowledgebase Articles based on customer feedback / comments.

10 Other Switching Processes

In addition to the key processes in section 9, there are further SM processes that are also required as part of Live Operation.

The details for these are included in this section.

10.1 Service Catalogue Management

Service Catalogue Management aims to ensure that a full end to end Service Catalogue is produced and maintained, containing accurate information on all operational Switching services and those being prepared to be run operationally. This process provides vital information for all other service management processes: service details, current status and the service interdependencies.

The existing providers of CDSs and CSS SPs are responsible for providing up to date service information that will be used to populate a full end to end Service Catalogue. Customer facing services will be published using the information provided for Market Participants to select the services they require to operate their business.

This is part of the overall service governance activities that will be undertaken by the Switching Operator and will only require a 'light touch' process.

10.1.1 Scope

The scope of the Service Catalogue Management process covers:

- Ensuring that all service information that the existing CDS providers and CSS SPs provide that relates to Switching, is collected and held in a central service catalogue;

Whilst only those aspects detailed above are included within the scope of Service Catalogue Management, the following exclusions are included to aid reader understanding:

- The service information that are not related to Switching services;
- Internal process and procedures that each service provider shall put in place to fulfil the Service Catalogue Management requirements.

10.1.2 Roles & Responsibilities

Process Role	Responsible Party	Key process responsibilities
Process Owner	Switching Operator	The Switching Operator is responsible for defining the Service Catalogue Management process and assuring the process meet the Switching service needs.
Process Manager	Switching Operator	The Switching Operator will collate the service catalogue information received from the existing CDS providers and CSS SPs and use it to publish the list of service available. This published list will be maintained to ensure that it is accurate and contains key information on the services provided.

Process Role	Responsible Party	Key process responsibilities
Process Participants	CSS Service Provider Existing CDS Provider	The existing CDS providers and CSS SPs shall create and maintain a service catalogue and will provide the Switching operator with information to enable the publication of a Switching Service catalogue
Process Customer	Market Participants	Market Participants will be responsible for the consumption of services that are made available through the Service Catalogue.

10.1.3 Process Summary

The following diagram shows the high-level Service Catalogue Management process.

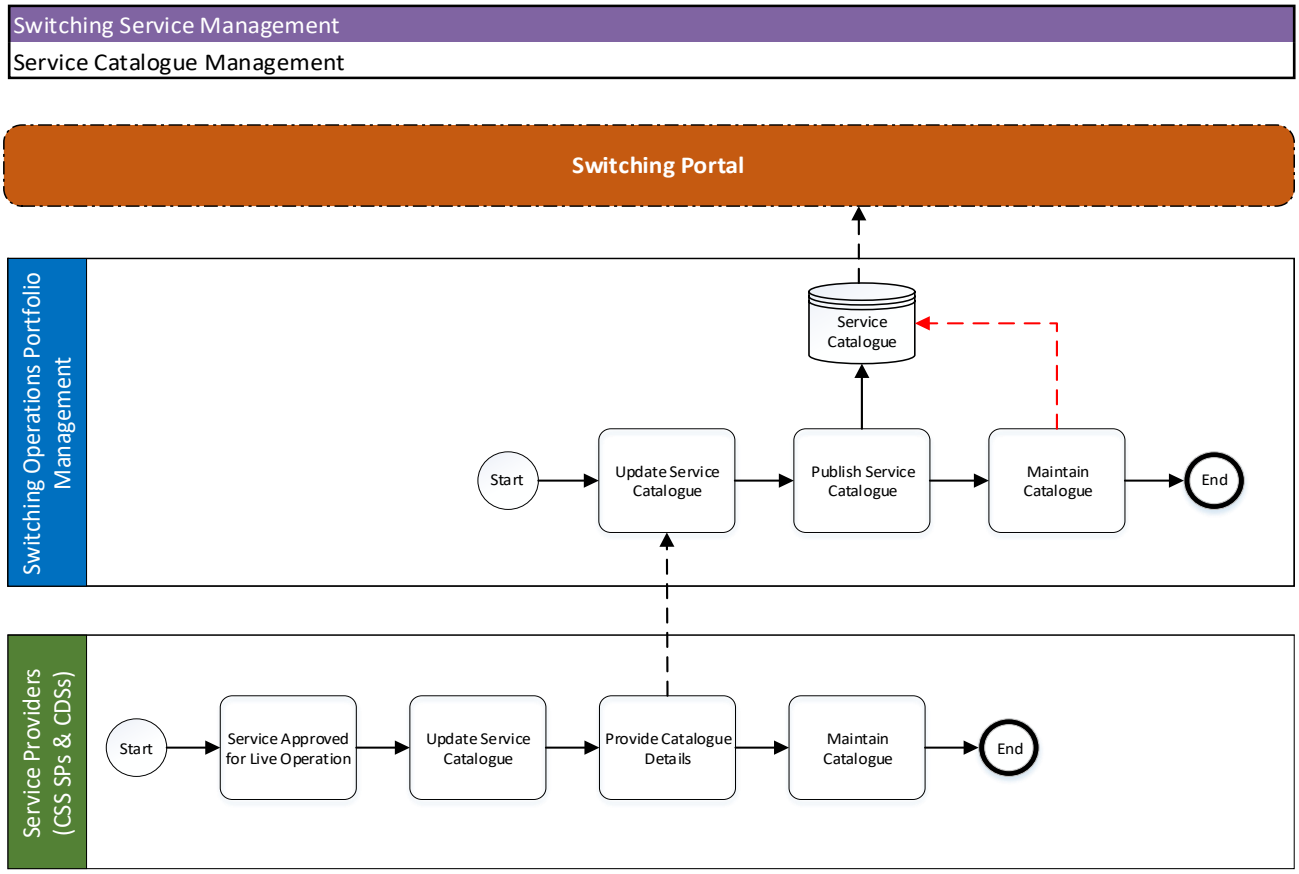


Figure 18 – Service Catalogue Management

10.1.4 Process KPIs

The following process KPIs shall be used to measure and assess the effectiveness of the Service Catalogue Management process:

KPI

Number of errors identified within the Service Management catalogue;
Number of changes/amendments applied to the Service Management catalogue.

10.2 Service Level Management

Service Level Management (SLM) aims to negotiate Service Level Agreements with service providers and to design services in accordance with the agreed service level targets. This process is also responsible for ensuring that all Operational Level Agreements (OLAs) and Underpinning Contracts are appropriate, and to monitor and report on service levels.

10.2.1 Scope

The scope of the Service Level Management process covers:

- Ensuring that achievable Service Level Agreements are in place with existing CDS providers and CSS SPs to support the needs of Switching service(s);
- The responsibility for making sure that all services are provided to the agreed service level;
- Reporting on Service performance against Service Level Agreements.

Whilst only those aspects detailed above are included within the scope of Service Level Management, the following exclusions are included to aid reader understanding:

- The management of Service Levels that are not related to Switching services;
- Internal process and procedures that each service provider shall put in place to ensure that agreed Service Levels are met.

10.2.2 Roles & Responsibilities

Process Role	Responsible Party	Key process responsibilities
Process Owner	Switching Operator	The Switching Operator is responsible for defining the Service Level Management process and assuring the process meets the Switching service needs.
Process Manager	Switching Operator	The Switching Operator will agree Service Level Agreements with CSS Service providers and ensure that OLA and underpinning contracts are in place to meet target SLAs. These SLAs will include those set in REC.
Process Participants	CSS Service Provider Existing CDS Provider	The CDS and CSS SPs shall monitor services against agreed SLAs and provide Switching Operations with SLA performance information on a regular basis or when reasonably requested by the Switching Operator.
Process Customer	Switching Operator	The Switching Operator will be responsible for collating and producing performance measurement reports.

10.2.3 Process Summary

The following diagram shows the high-level Service Level Management process.

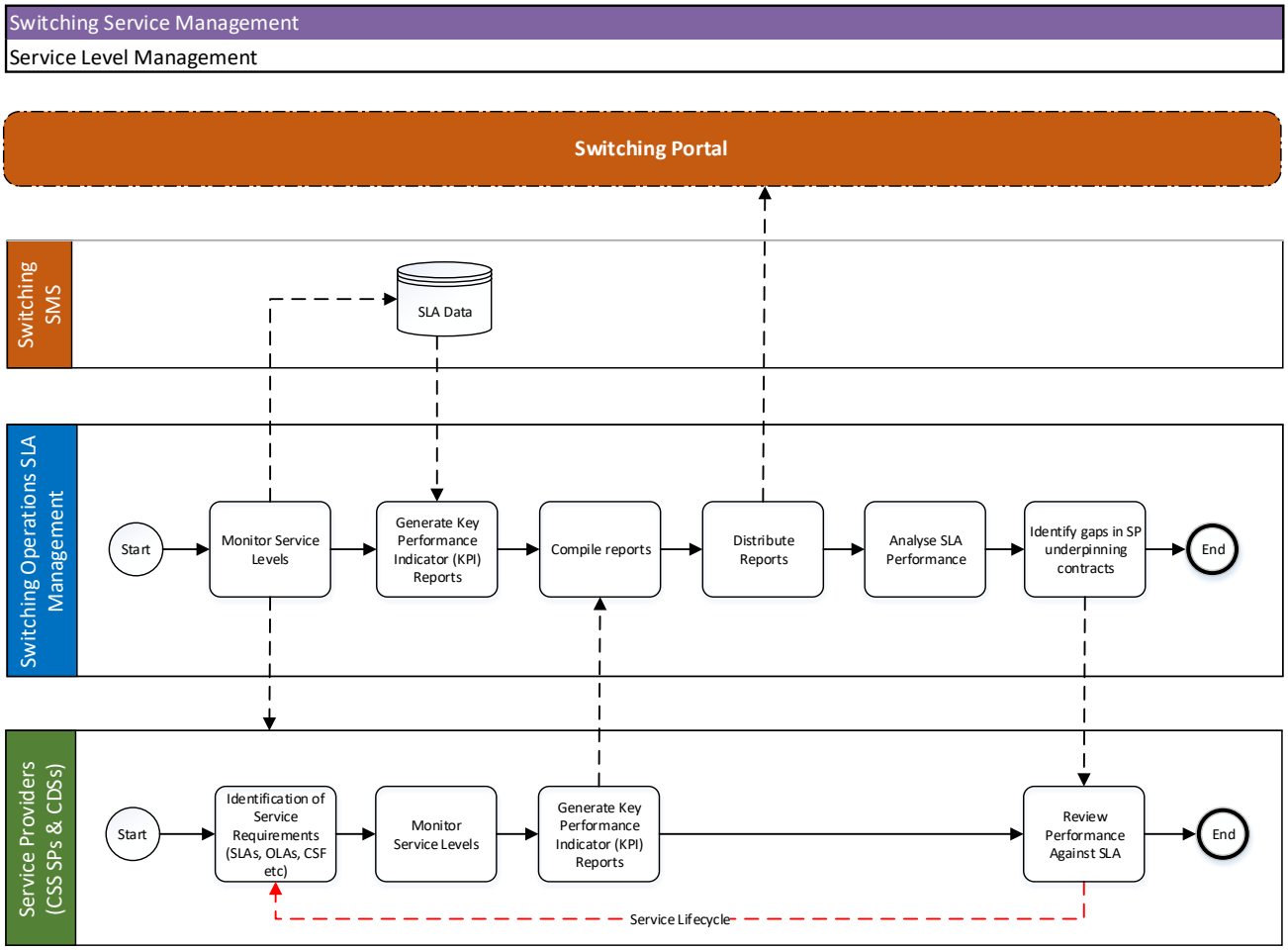


Figure 19 – Service Level Management

10.2.4 Process KPIs

The following process KPIs shall be used to measure and assess the effectiveness of the Service Level Management process:

KPI
Percentage of services covered by SLAs;
Percentage of services covered by OLAs;
Percentage of monitored SLAs;
Percentage of SLAs under review;
Percentage fulfilment of Service Levels where the agreed service levels are fulfilled.

10.3 Demand Management

Demand Management provides the ability to understand the key periods of activity through monitoring services, identifying and recording activity patterns. It optimises the use of capacity by moving workload to less utilised times, servers, or places and considering differential charging to encourage Service Users to use services at less busy times.

The existing providers of CDSs and CSS SPs are responsible for understanding, anticipating and influencing demand for services and will coordinate with the Switching Operator to ensure that the services provided have sufficient capacity to meet the required demand.

10.3.1 Scope

The scope of the Demand Management process covers:

- The responsibility to understand, anticipate and influence customer demand for services across all services related to Switching;
- The responsibilities for making sure that all service providers are aware of demand for services and to work with Capacity Management to ensure there is sufficient, but not too excessive, capacity to meet the required demand.

Whilst only those aspects detailed above are included within the scope of Demand Management, the following exclusions are included to aid reader understanding:

- The management of demand that is not related to Switching services;
- Internal process and procedures that each service provider shall put in place to ensure that the demand for services is met.

10.3.2 Roles & Responsibilities

Process Role	Responsible Party	Key process responsibilities
Process Owner	Switching Operator	The Switching Operator is responsible for defining the Demand Management process and assuring the process meets the Switching service needs.
Process Manager	CSS Service Provider Existing CDS Provider	The existing CDS providers and CSS SPs shall monitor demand for services and communicate excessive demand to the Switching Operator. Where demand cannot be met by the Switching Operator shall be alerted along with a solution in order to ensure the continued service availability.
Process Participants	CSS Service Provider Existing CDS Provider	Each existing CDS providers and CSS SPs are responsible for understanding, anticipating and influencing customer demand for their own service(s) but shall report any excessive demand that would breach Switching service tolerances to the Switching Operator. The Demand management function will work alongside Capacity and Availability

Process Role	Responsible Party	Key process responsibilities
		management to ensure the continued service availability.
	Switching Operator	Switching Operator Demand Management will discuss the excessive demand with the service provider(s) to see if the traffic can be managed to ensure the continued service availability
Process Customer	Market Participants	Market Participants shall report any excessive demand that they predict will be placed on the Switching Service.

10.3.3 Process Summary

The following diagram shows the high-level Demand Management process.

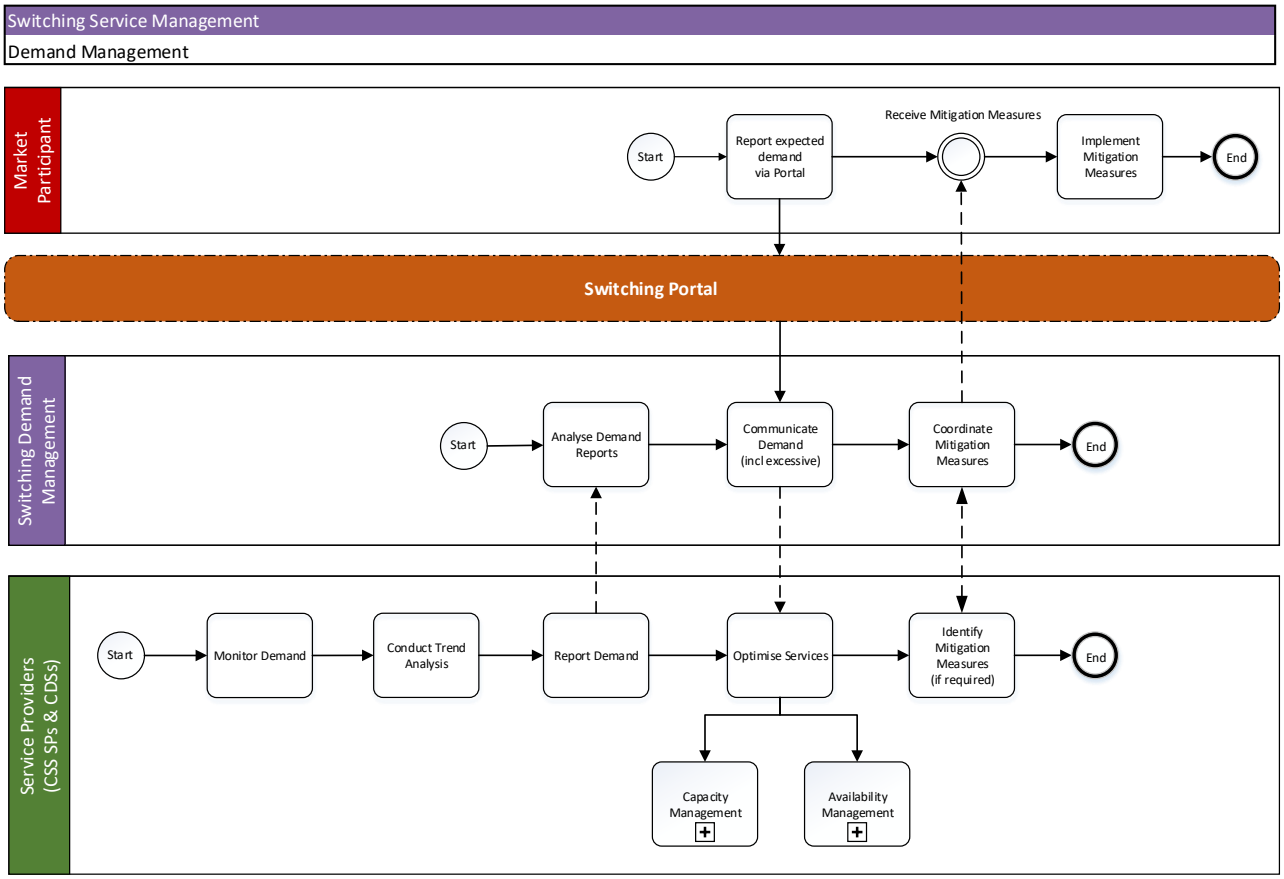


Figure 20 – Demand Management

10.3.4 Process KPIs

The following process KPIs shall be used to measure and assess the effectiveness of the Demand Management process:

KPI
Percentage of times when capacity resources are being used below what's expected;
Percentage of Incidents based on capacity problems related to Demand Management;
Deviation average between predicted demand and actual demand;
Number of times Demand Management is triggered.

10.4 Availability Management

Availability Management aims to define, analyse, plan, measure and improve all aspects of the availability of IT services. It is responsible for ensuring that all IT infrastructure, processes, tools, roles etc are appropriate for the agreed availability targets.

The Switching Operator will ensure that the CSS service providers operate Availability Management in accordance with their agreements, including agreeing and setting availability targets for CSS services.

Existing providers of CDSs and CSS SPs are responsible for the Availability Management of their services and will define, analyse, plan, measure and improve all aspects of the availability of their services. They are responsible for ensuring that all infrastructure, processes, tools, roles etc are appropriate for the agreed availability targets.

10.4.1 Scope

The scope of the Availability Management process covers:

- To maintain an end to end availability plan to analyse, measure and improve all aspects of the availability of Switching services;
- The responsibilities for making sure that all service providers have resilience and recovery mechanisms in place to meet availability targets.

Whilst only those aspects detailed above are included within the scope of Availability Management, the following exclusions are included to aid reader understanding:

- The management of Availability of services that are not related to Switching;
- Internal process and procedures that each service provider shall put in place to ensure the availability of service meet their requirements.

10.4.2 Roles & Responsibilities

Process Role	Responsible Party	Key process responsibilities
Process Owner	Switching Operator	The Switching Operator is responsible for defining the Availability Management process and assuring the process meets the Switching service needs.
Process Manager	CSS Service Provider Existing CDS Provider	The existing CDS providers and CSS SPs shall ensure that they have adequate plans in place to ensure that their services are available and meet the agreed SLAs.

Process Role	Responsible Party	Key process responsibilities
Process Participants	CSS Service Provider Existing CDS Provider	The CDS and CSS SP shall be responsible for the Availability of their service and shall provide Switching Operations with an Availability plan that details any planned downtime or degradation of their Switching service(s) a month prior to any planned outage or disruption. The Availability management function will work alongside Capacity and Demand management to ensure the continued service availability.
	Switching Operator	The Switching Operator will be responsible for the creating of an end to end availability plan to ensure that continuity of services and will communicate any unplanned downtime.
Process Customer	Switching Operator	The Switching Operator is responsible for the continual improvement of the service and for the collation and provision of Switching service availability performance reports that are to be issued to interested parties.

10.4.3 Process Summary

The following diagram shows the high-level Availability process.

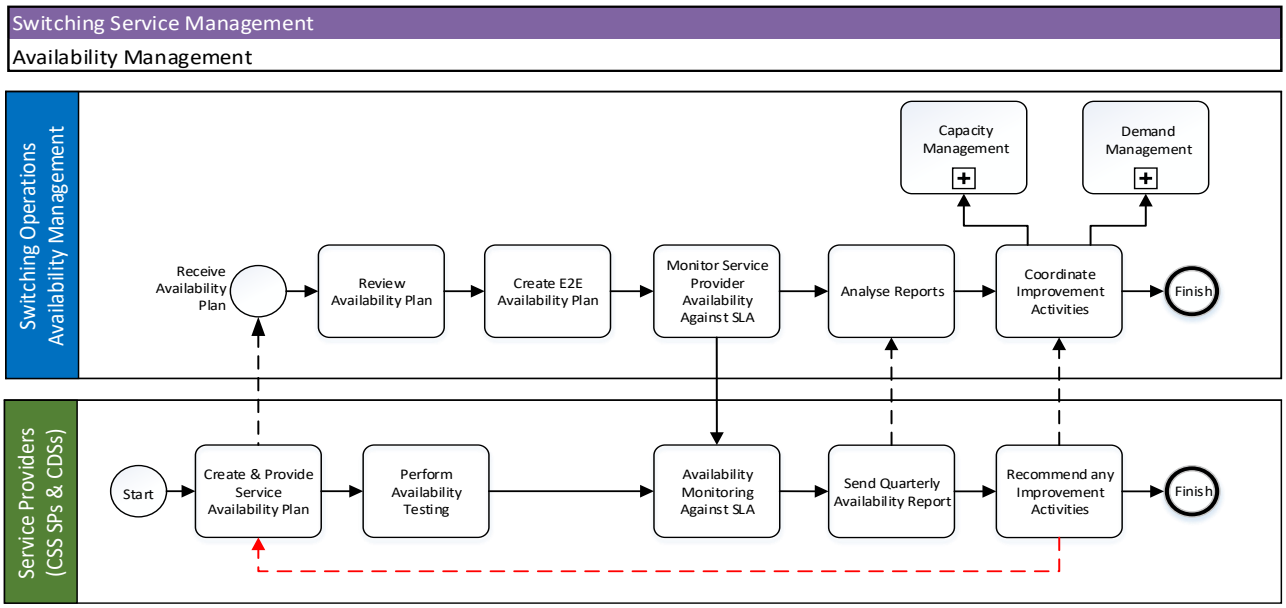


Figure 21 – Availability Management

10.4.4 Process KPIs

The following process KPIs shall be used to measure and assess the effectiveness of the Availability Management process:

KPI
Number of Service Interruptions;
Duration of Service Interruptions;
Percentage of Availability Monitoring setup for services and infrastructure components.

10.5 Capacity Management

Capacity Management aims to ensure that the capacity of services and the infrastructure is able to deliver the agreed service level targets in a cost effective and timely manner.

The existing providers of CDSs and CSS SPs are required to manage, control and predict the performance and capacity of operational services. This includes initiating proactive and reactive action to ensure that the performances and capacities of services meet their agreed targets.

The Switching Operator will provide other Service Management processes and IT Management with information related to service and resource capacity, utilisation and performance.

10.5.1 Scope

The scope of the Capacity Management process covers:

- Ensuring the capacity of Switching services and the Switching infrastructure is able to deliver the agreed service level targets in a cost effective and timely manner;
- The responsibilities for making sure that all service providers have the required capacity of services in place to meet agreed service levels.

Whilst only those aspects detailed above are included within the scope of Capacity Management, the following exclusions are included to aid reader understanding:

- The management of Capacity of services that are not related to Switching;
- Internal process and procedures that each service provider shall put in place to ensure the capacity, utilisation and performance of service(s) meet the requirements.

10.5.2 Roles & Responsibilities

Process Role	Responsible Party	Key process responsibilities
Process Owner	Switching Operator	The Switching Operator is responsible for defining the Capacity Management process and assuring the process meets the Switching service needs.
Process Manager	Switching Operator	The Switching Operator will be responsible for creating an end to end capacity plan to ensure continuity of services.
Process Participants	CSS Service Provider	The existing CDS providers and CSS SP shall be responsible for the Capacity of their service and shall provide Switching Operations with a Capacity plan for all service elements agreed. The SPs shall manage,

Process Role	Responsible Party	Key process responsibilities
	Existing CDS Provider	control and predict the performance, utilisation and capacity of IT resources required to meet agreed service target SLAs and shall recommend to Switching Operations where capacity upgrades or downgrades should be carried out.
Process Customer	Switching Operator	The Switching Operator is responsible for the continual improvement of the service and for the collation and provision of Switching capacity performance reports that are to be issued to interested parties.

10.5.3 Process Summary

The following diagram shows the high-level Capacity Management process.

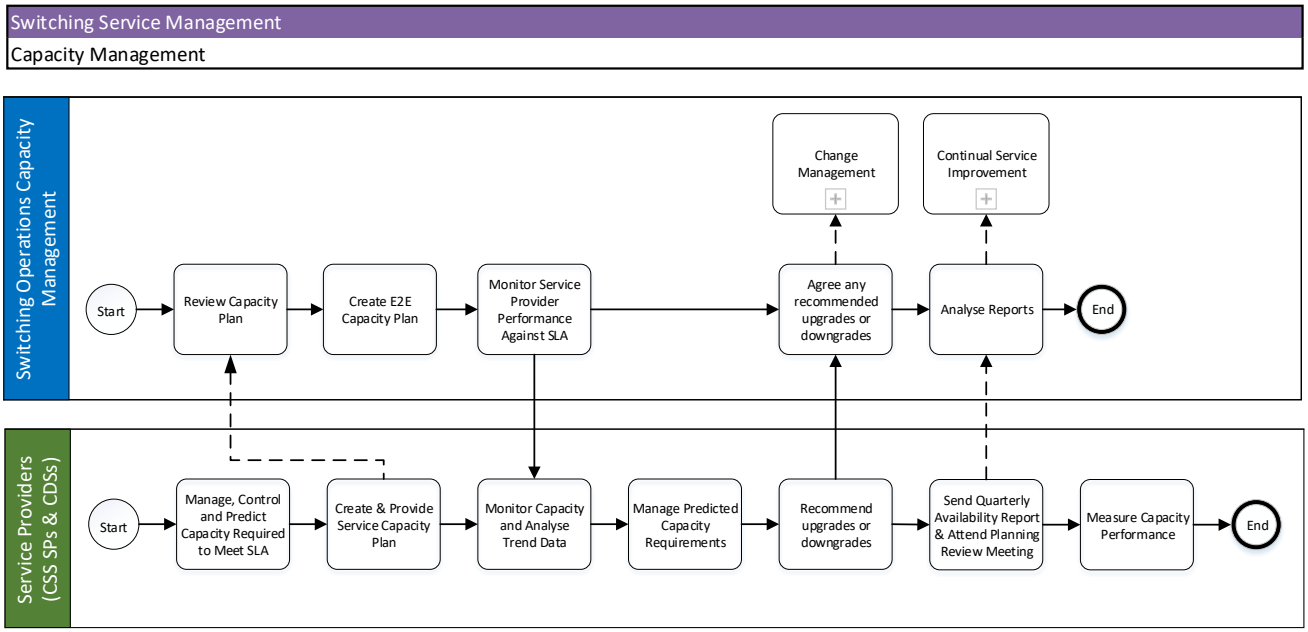


Figure 22 – Capacity Management

10.5.4 Process KPIs

The following process KPIs shall be used to measure and assess the effectiveness of the Capacity Management process:

KPI
Percentage of Incidents due to Capacity Shortages;
Number of Capacity Adjustments required to meet demand;
Percentage of Unplanned Capacity Adjustments;
Resolution time of capacity shortage;

Percentage of Capacity Monitoring setup for services and infrastructure components.

10.6 Information Security Management

Information Security Management ensures the confidentiality, integrity and availability of an organisation's information, data and IT services.

The Switching Operator shall define the architectural and security principles and the security requirements that apply to the security design of the CSS and for the interfaces that will be used to communicate with Market Participants. The existing providers of CDSs and CSS SPs shall ensure that they adopt security principles and safeguard their systems and data using recognised Standards, Frameworks and best practices.

10.6.1 Scope

The scope of the Information Security Management process covers:

- Ensuring the confidentiality, integrity and availability of Switching's information, data and services;
- The responsibilities for making sure that all service providers comply with a defined security policy.

Whilst only those aspects detailed above are included within the scope of Information Security Management, the following exclusions are included to aid reader understanding:

- The security of information that are not related to Switching services;
- Internal process and procedures that each service provider shall put in place to ensure compliance to the defined security policy.

10.6.2 Roles & Responsibilities

Process Role	Responsible Party	Key process responsibilities
Process Owner	Switching Operator	The Switching Operator is responsible for defining the Information Security Management process and assuring the process meets the Switching service needs.
Process Manager	Switching Operator	The Switching Operator shall ensure that security measures and procedures are in line with risk perceptions from the business side and will verify if those measures and procedures are regularly maintained and tested.
Process Participants	CSS Service Provider Existing CDS Provider	The CDS and CSS SP shall be responsible for producing, in conjunction with the Switching Operator, a data security policy describing how the organisation will secure the data it accesses and/or processes throughout its lifecycle. The SPs shall report all identified security vulnerabilities to the Switching Operator when identified and shall assist with the

Process Role	Responsible Party	Key process responsibilities
		resolution of any non-compliance security issues that are identified.
Process Customer	Switching Operator	The Switching Operator is responsible for the continual improvement of the service and the confidentiality, integrity and availability of Switching's information, data and services to Market Participants.

10.6.3 Process Summary

The following diagram shows the high-level Information Security Management process.

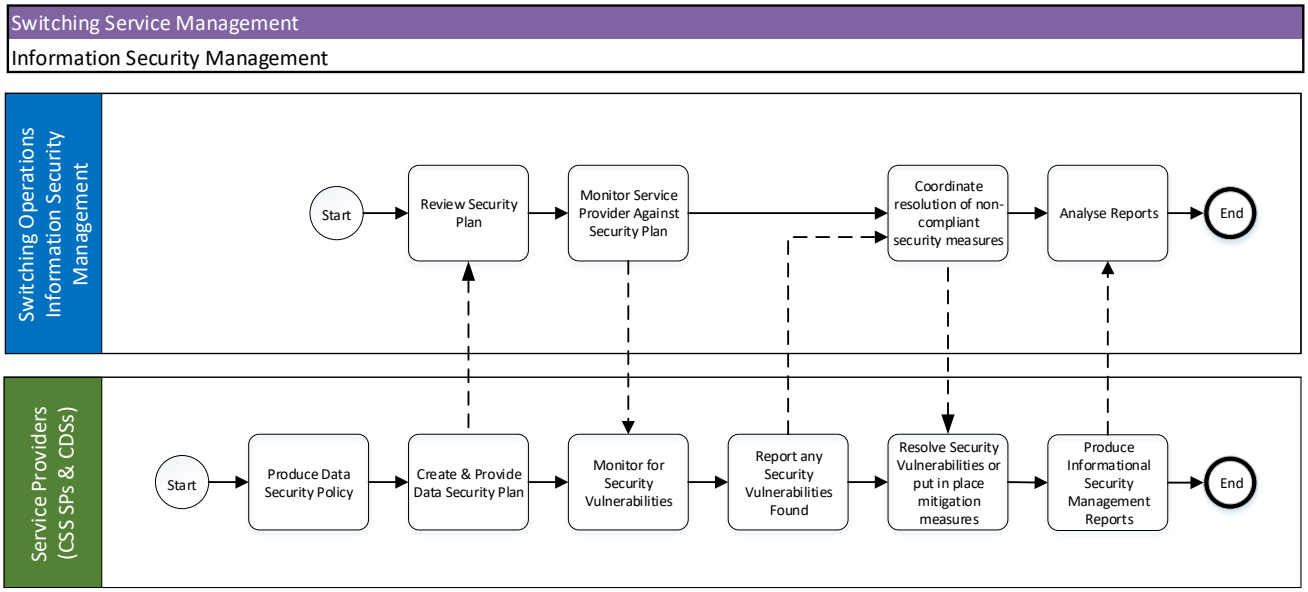


Figure 23 – Information Security Management

Note: The information Security process will be carried out by the Switching Operator's security team.

10.6.4 Process KPIs

The following process KPIs shall be used to measure and assess the effectiveness of the Information Security Management process:

KPI
Implementation duration from the identification of a security threat to the implementation of a suitable counter measure;
Number of major security incidents identified;
Number of security-related service downtimes;

Number of security tests carried out;
Number of identified shortcomings during security tests.

10.7 Service Continuity Management

Service Continuity Management assures that Services will continue through major failures or disruptive events. It produces and manages a Service Continuity Plan that restores services and it forms a significant part of the business continuity plans.

The Switching Operator shall ensure that the Service Providers' service continuity plans interface as appropriate in order to protect the continuity of the Switching Arrangements. The existing providers of CDSs and CSS SPs will be required to create a continuity plan for their services and shall in conjunction with the Switching Operator create a full end to end continuity plan.

10.7.1 Scope

The scope of the Service Continuity Management process covers:

- Ensuring that Switching SPs have continuity plans in place to reduce the risk from disaster events and the necessary planning for the recovery of Switching services.
- Ensuring that the end-to-continuity plan for Switching is tested at least annually.

Whilst only those aspects detailed above are included within the scope of Service Continuity Management, the following exclusions are included to aid reader understanding:

- The continuity of services that are not related to Switching;
- Internal process and procedures that each service provider shall put in place to ensure the continuity of service(s).

10.7.2 Roles & Responsibilities

Process Role	Responsible Party	Key process responsibilities
Process Owner	Switching Operator	The Switching Operator is responsible for defining the Service Continuity Management process and assuring the process meets the Switching service needs.
Process Manager	Switching Operator	The Switching Operator shall ensure that continuity plans, process and procedures for services provided is in place to minimize the impact on Services in the event of a disaster.
Process Participants	CSS Service Provider Existing CDS Provider	The existing CDS providers and CSS SPs shall provide a robust business continuity and disaster recovery (BCDR) plan to ensure that their service(s) is restored within the agreed SLAs in the event of a failure.
Process Customer	Switching Operator	The Switching Operator is responsible for the continual improvement of the service and shall report on any recovery events to all interested parties.

10.7.3 Process Summary

The following diagram shows the high-level Service Continuity Management process.

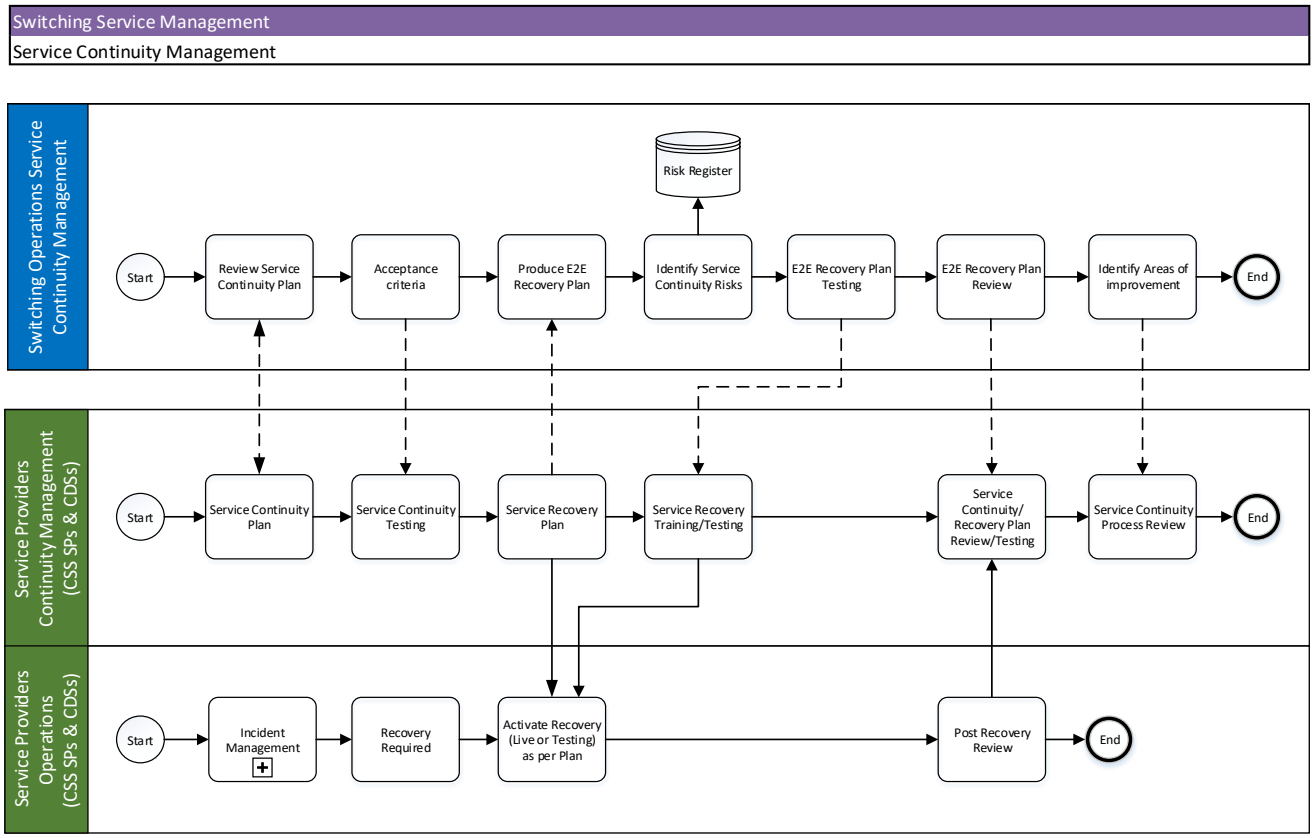


Figure 24 – Service Continuity Management

10.7.4 Process KPIs

The following process KPIs shall be used to measure and assess the effectiveness of the Service Continuity Management process:

KPI
Percentage of services with continuity agreements in place;
Number of disaster practices undertaken;
Number of identified shortcomings during disaster practices.

10.8 Evaluation Management

Change Evaluation aims to assess Major Changes, like the introduction of a new service or a substantial change to an existing service, before those Changes are allowed to proceed to the next phase in their lifecycle.

Existing providers of CDSs and CSS SPs will be asked to assess proposed releases or Major Changes to systems and services before and after the Change planning, build and

deployment phases. The Switching Operator will be responsible for coordinating the evaluation of Changes to ensure the successful implementation of all proposed Changes and releases.

10.8.1 Scope

The scope of the Evaluation Management process covers:

- Ensuring that major changes or releases are evaluated by all interested and affected parties throughout the change or release process stages;
- Ensuring that the responsibilities for making sure that any impact assessment, comments, feedback or concerns received are documented and circulate**.**

Whilst only those aspects detailed above are included within the scope of Evaluation Management, the following exclusions are included to aid reader understanding:

- The evaluation of Major changes or releases that are internal and not related to Switching services;
- Internal process and procedures that each service provider shall put in place to ensure that the evaluation of changes or releases are competed.

10.8.2 Roles & Responsibilities

Process Role	Responsible Party	Key process responsibilities
Process Owner	Switching Operator	The Switching Operator is responsible for defining the Evaluation Management process and assuring the process meets the Switching service needs.
Process Manager	Switching Operator	The Switching Operator shall ensure that all Major Changes or releases undergo a formal Change Evaluation before being authorised. The results of a formal Change Evaluation will be documented in a Change Evaluation Report that will fed into the Change and Release processes to aid with their approval and execution.
Process Participants	CSS Service Provider Existing CDS Provider	The existing CDS providers and CSS SPs shall be asked to assess all Changes relating to Switching services prior to planning, build & deployments phases and after deployment. The SPs shall communicate any concerns relating to a proposed Change to the Switching Operator.
Process Customer	Switching Operator	The Switching Operator is responsible for the Continual Improvement of the service and shall ensure that Market Participants can use the new or changed service in accordance with the service design.

10.8.3 Process Summary

The following diagram shows the high-level Evaluation process.

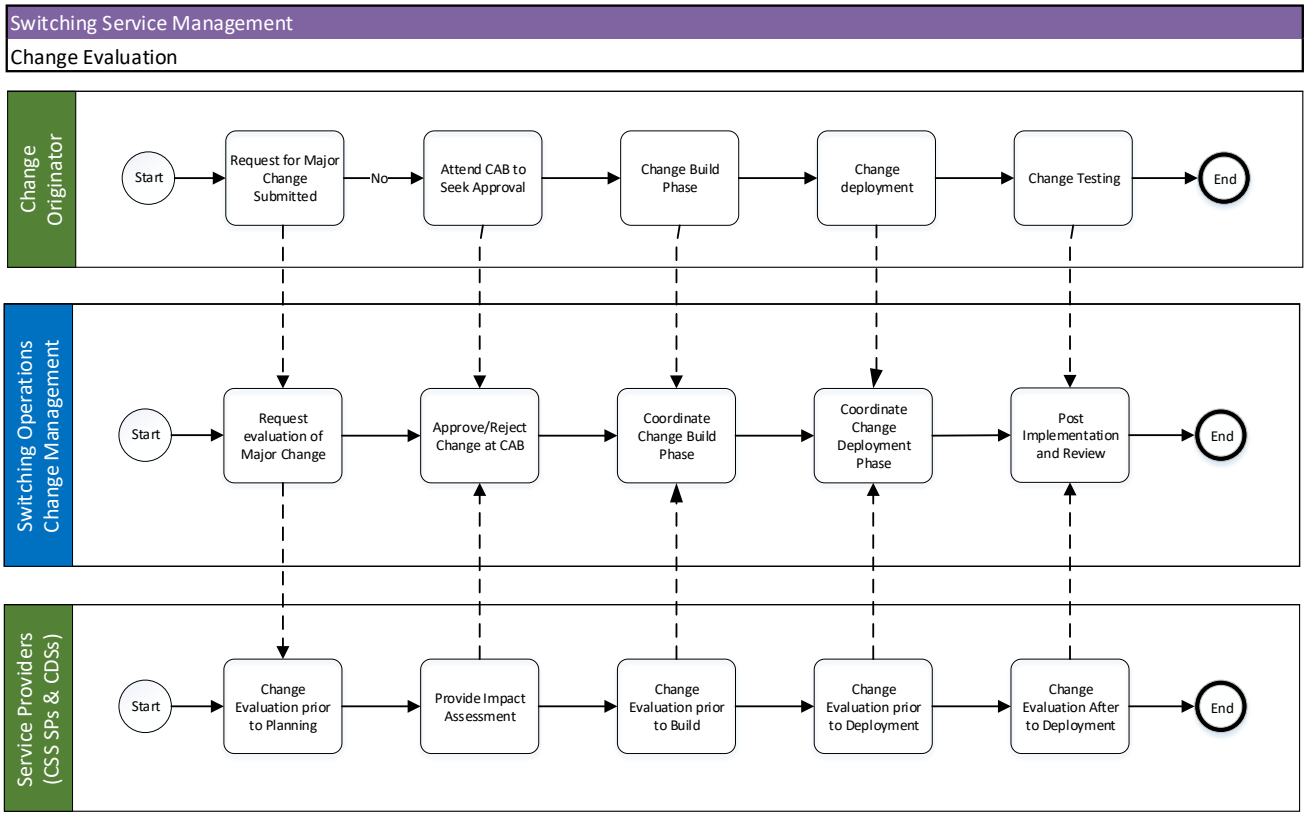


Figure 25 – Evaluation Management

10.8.4 Process KPIs

The following process KPIs shall be used to measure and assess the effectiveness of the Evaluation Management process:

KPI
Percentage of Changes that required an evaluation / impact assessment;
Percentage of Changes rejected based on evaluation / impact assessment.

10.9 Risk Management

The objective of Risk Management is to identify, assess and control risks. This includes analysing the value of assets to the business, identifying threats to those assets, and evaluating how vulnerable each asset is to those threats. This process specifies how risk is quantified, what risks the organisation is willing to accept, and who is in charge of the various Risk Management duties.

10.9.1 Scope

The scope of the Risk Management process covers:

- To define a framework for Risk Management. Most importantly, this process specifies how risk is quantified, what risks the organization is willing to accept, and who is in charge of the various Risk Management duties.
- Ensures that all identified risks to Switching are highlighted, communicated, assessed by all interested and mitigation measures or resolutions of those risks are identified and implemented;
- The responsibilities to determine where risk mitigation measures are required, and to identify Risk Owners who will be responsible for their implementation and ongoing maintenance**;**
- To coordinate and monitor the progress of counter measure implementation, and to take corrective action where necessary.

Whilst only those aspects detailed above are included within the scope of Risk Management, the following exclusions are included to aid reader understanding:

- The Risks that are internal and not related to Switching services;
- Internal process and procedures that each service provider shall put in place to ensure that the Risks to relating Switching are identified, communicated and migrating measures or solutions are implemented

10.9.2 Roles & Responsibilities

Process Role	Responsible Party	Key process responsibilities
Process Owner	Switching Operator	The Switching Operator is responsible for defining the Risk Management process and assuring the process meets the Switching service needs.
Process Manager	CSS Service Provider Existing CDS Provider	The existing CDS providers and CSS SPs shall be responsible for the identification, communication and resolution of Risk to their provided service(s). Where a solution cannot be identified mitigating measure shall be put in place to ensure the continuity and continued operations of services. The SPs shall communicate any risk relating to Switching.
Process Participants	Switching Operator	The Switching Operator shall ensure that all Risks are analysed to identify the impact and to ensure that a solution is found, or mitigation measure put in place to resolve threats.
Process Customer	Switching Operator	The Switching Operator shall ensure that all Risks identified to the Switching Operator will be added to an end to end Risk register and communicated.

10.9.3 Process Summary

The following diagram shows the high-level Evaluation process.

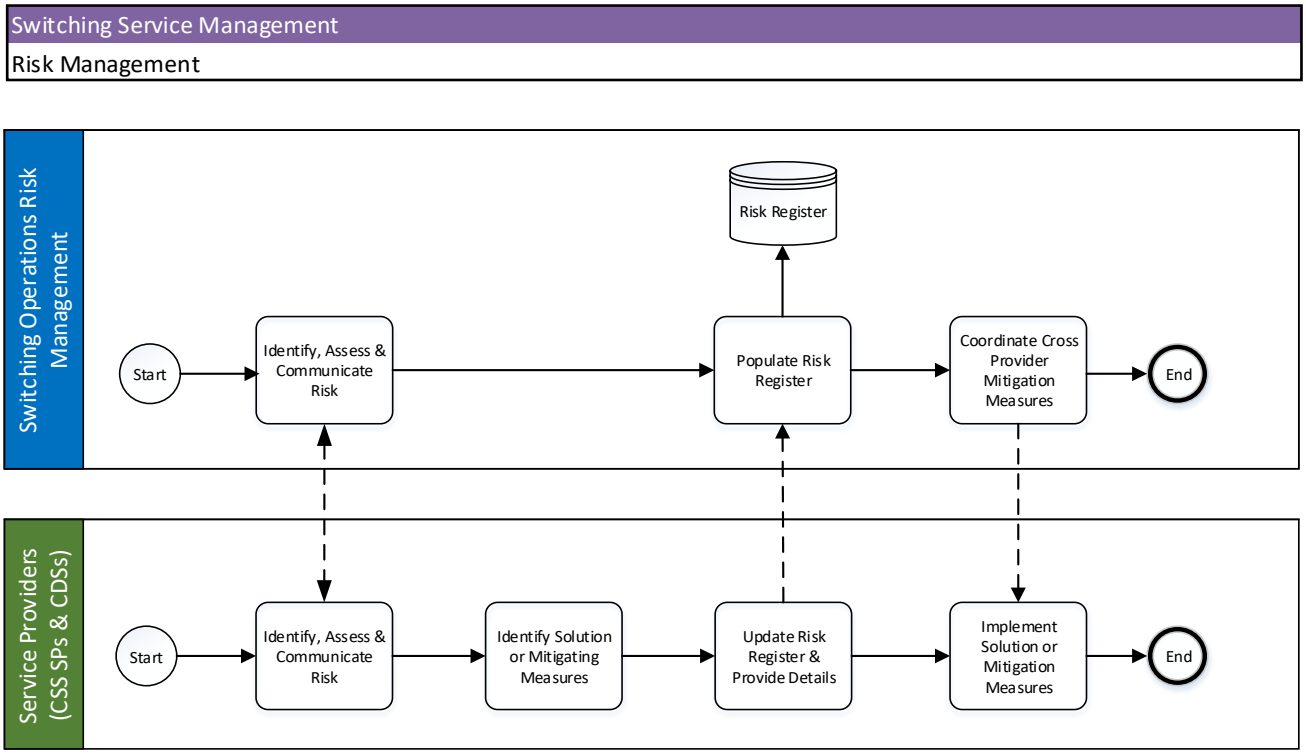


Figure 26 – Risk Management

10.9.4 Process KPIs

The following process KPIs shall be used to measure and assess the effectiveness of the Evaluation Management process:

KPI
Number of identified Risks;
Percentage of identified Risks with an assigned owner;
Percentage of Changes rejected based on evaluation / impact assessment.

11 Other ITIL Processes

There are some processes that although they are part of the ITIL lifecycle, for the Switching Programme, they are being managed in other ways. These processes are listed below along with a description summary.

11.1 Service Portfolio Management

Service Portfolio Management ensures that a service provider has the right mix of services to meet required business outcomes at an appropriate level of investment. The Switching Operator will maintain a Service Portfolio for services that are required for the Switching Operator and CSS.

11.2 Transition Planning and Support

The Delivery Workstream is managing the Design, Build and Test (DBT) phase and Implementation of CSS however the Switching Operator will have a role in the planning and coordination of the resources required to deploy future major Releases.

11.3 Service Validation and Testing

The Service Validation and Testing ensures that deployed releases and the resulting services meet customer expectations. The Switching Operator will verify that the it is able to support new or updates to all service that they a responsible to support.

11.4 Release and Deployment

The primary goal of the Release and Deployment process is to ensure that the integrity of the live environment is protected and that the correct components are released through coordinated activities. After the implementation of CSS, the Switching Operator will have a role to plan, schedule, coordinate and control the movement of CSS releases to test and live environments thereafter.

11.5 Financial Management

Financial Management is an internal process for each CSS SP and each existing provider of a CDS, so is for each organisation to design. The Switching Operator will design and manage budgeting, accounting and charging requirements for services provided.

11.6 Service Strategy

The Service Strategy process aims to assess service provider's offerings and capabilities in order to develop a strategy to serve customers. For the initial launch of CSS, the strategy stage has already completed but its continual review and improvement will be a responsibility of the Switching Operator along with cooperation from the CSS SPs and existing providers of a CDS.

11.7 Business Relationship Management

This will be managed by dedicated industry and service provider representatives as part of the wider Customer Experience programme.

12 Bespoke Processes

The services described in this section have been identified as additional Service Management requirements and fall outside of the normal ITIL processes. The service provider responsible for the service shall ensure the necessary people, process and technology is available to support these additional requirements as part of their service offering. Below is a list of each of these additional processes and who is responsible:

12.1 Switching Operator

- Forced Initial Registration;
- Supplier of Last Resort (SOLR);
- Erroneous Switch Resolution Service,
- User Onboarding.

12.2 CSS Registration Service provider

- Meter Point Location Update (Manual);
- Address Data Stewardship;
- Switching Domain Data Service Exceptions;
- Supporting User Onboarding.

12.3 Address Service provider

- Address Data Stewardship.

Glossary of Terms

Acronym / Term	Definition
BCDR	Business Continuity and Disaster Recovery
CDS	Central Data Service (including new and existing providers)
CES	Consumer Enquiry Service
CR	Change Request
CSI	Continuous Service Improvement
CSS	Central Switching Service
CSS SMS	CSS Service Management System
CSS SP	All new CSS Service Providers.
DCC	Data Communications Company
DES	Data Enquiry Service, operated by Xoserve
DSP	Data Services Provider
E2E	End-to-End
ECOES	Electricity Central Online Enquiry Service
ITIL	Information Technology Infrastructure Library
Market Participant	Means 'the combination of a Retail Energy Company and a Role Code' and includes Energy Suppliers, Gas Transporters, DNOs and Supplier Agents i.e. The industry parties involved in Switching.
MIM	Major Incident Management
MRASCo	Administers the Master Registration Agreement.
REC	Retail Energy Code
RECCo	Retail Energy Code Company
RP2a	Ofgem's preferred Reform Package for the Switching Programme
SEC	Smart Energy Code
SLA	Service Level Agreement
SM	Service Management

Acronym / Term	Definition
SOC	Strategic Outline Case
SPAA	Supply Point Administration Agreement
SPOF	Single Point of Failure
SSP	Self Service Portal
Switching Operator	The organisation or team that operates the Centralised Switching Services and will manage and co-ordinate the SM Model.
Switching User	Any organisation that is allowed to ‘use’ the CSS under REC
TOM	Target Operating Model
TPIs	Third Party Intermediaries
UK Link	Provider of systems that support the competitive gas market, operated by Xoserve.