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D-4.1.9 Switching Arrangements Service Management Strategy

Decision

Overview:

The purpose of this document is to define the Service Management Strategy across the End to End Switching Arrangements and to identify the Service Management requirements that must be built into the Switching Service.

This Service Management Strategy is designed to ensure the cohesive alignment of people and processes and the integration of the supporting technologies across the E2E Switching Arrangements, in order to achieve the following:

- co-ordination of Service Management;
- quality of services provided;
- reduced risk in service provision; and
- compliance with good practice.

The document has considered and evaluated three options for the level of Service Management required for their impact on Customers, on Market Participants and for impact on Delivery, Costs and Risks.

It details the selected option and discusses the high level Service Management regulation requirements.

Associated documents

Document Title or Name
D-1.1 Architectural Principles
D-4.1.2 E2E Detailed Design Model (ABACUS Switching Design Repository) Note that this product also fulfils D-4.1.3 Data Architecture and Data Governance
D-4.1.4 E2E Switching Arrangements NFR
D-4.1.6 E2E Operational Choreography
D-4.1.7 Technology and Communications Standards
D-4.1.9 E2E Switching Service Management Strategy
D-4.3.3 E2E Testing Plan
D-4.3.4 E2E Transition Plan
D-4.3.6 E2E Data Migration Plan
Switching Programme – Strategic Outline Case (Ofgem issued document)
Product Description for D_4.1.5_E2E_Solution Architecture 30032017
D- 4.1 – DB2 E2E Design Assumptions

Contents

Executive Summary

The current change of supplier processes for gas and electricity operate independently, predominantly using batch systems. Each organisation involved in the process operates its own separate Service Management (SM) processes.

The Switching Programme will deliver faster and more reliable switching and will facilitate dual fuel switches. Many of the Switching processes will operate in real time. The new arrangements for Switching will require a more co-ordinated and integrated Service Management approach.

Service management for Switching will follow an ITIL-based lifecycle, to provide a set of best practices to effectively manage Switching services across the E2E Switching Arrangements.

This Service Management Strategy is designed to ensure the cohesive alignment of people and processes and the integration of the supporting technologies across the E2E Switching Arrangements, in order to achieve the following:

- co-ordination of Service Management;
- quality of services provided;
- reduced risk in service provision; and
- compliance with good practice.

What is Service Management?

Service Management is the implementation and management of quality services, directed by policies, to meet the needs of the business. Its purpose is to enable an organisation to plan, design, deliver, operate and control services offered to its customers.

Switching Service Management

The Service Management methodology for Switching includes services and systems sourced from a number of service providers and will support cross-functional, cross-process, and cross-provider integration. It creates an environment where the aim is to provide an effective cross-service provider operation, making sure that all service providers contribute to the successful management of the E2E Switching service.

Switching 'To-Be' Model

The E2E Switching Arrangements have been analysed in order to determine where co-ordinated or common Service Management are required to address the key issues:

- **Issue #1:** Individual Service Providers act independently with no overall coordination;
- **Issue #2**: Individual Service Providers fulfilling their contractual obligations does not provide assurance that the E2E Switching service delivered will be acceptable;
- **Issue #3**: Measuring the E2E Switching service availability or performance is not currently monitored or tracked.

The proposed model adds an E2E Service Management layer to the current model.

The Service Management layer covers the processes that will be put in place to manage the Switching service across multiple IT and business service providers to deliver an efficient Switching service to the industry.

Service Management will be managed by the Switching Operations team who will have the responsibility of effectively managing the coordination of the E2E Switching services.

In Smart Metering the Switching Operations function is provided by DCC. For Switching, the licence conditions have yet to be set, therefore throughout this document the term Switching Operations has been used.

Service Management Processes

Switching will benefit from the full range of ITIL Service Management processes. However, some of these processes will be required to a greater level of detail than others.

There are also options around the extent to which the SM of all CDSs should be integrated.

Service Management (SM) Options Considered for Switching

Three options have been considered and evaluated for their impact on Customers, on Market Participants and for impact on Delivery, Costs and Risks

The options considered are:

1. Each organisation operates SM independently;
2. Service Management processes are standardised and integrated for all Central Data Services (CDSs);
3. Key SM processes are integrated. Others are co-ordinated and some operate independently.

Preferred Option

Having considered the options, the relevant advantages and disadvantages, the selected option is Option 3. Each Service Management process has been analysed to determine the commonality that is needed, and the requirements to be fulfilled by each party.

This will minimise the changes to existing systems and reduce the risk of delays to a customer's switch; whilst delivering the majority of the benefits of option 1, at the acceptable cost of some manual processing behind the scenes. The key benefits it will deliver are:

- a single point of contact for Market Participants for Switching information issues and queries; and
- co-ordinated E2E Service Management that will ensure that will deliver timely resolution of incidents and problems to facilitate faster, reliable Switching.

Impact on CDSs

The new CSS SP, Service Desk and Switching Operations will all be set up specifically for Switching, therefore will require new processes to be set up for all SM activities.

The changes for existing CDSs have been assessed and colour coded to show the level of change required. This is shown in section 9.

Mostly the changes will be the provision of information to the Switching Operator, regarding planned and unplanned outages, the resolutions of incidents. Each CDS will be required to review its Capacity Management, Information Security Processes and Business Continuity and Disaster Plans and Processes to ensure that they meet the requirements of Switching.

CDSs and CDS Providers

Each CDS Provider is responsible for its component parts of the switching arrangements and will manage its own services, technology and tools to support its services. The systems are referred to as the CDSs and the organisation who is contracted to provide the CDS is referred to as the CDS Provider. Some of the system requirements have been outsourced to a third party. For example, Xoserve and Gemserv are the CDS providers, and UK Link, DES and ECOES are the CDSs.

Service Management will require the provision of information, appropriate tooling, diagnostic and reporting capabilities from each of the CDS Providers so that an effective Switching service, with appropriate service capability and ability to meet SLAs is achieved.

The provider of the Customer Enquiry Service (CES), should it proceed, will be responsible for its own set of Service Management processes to support consumers but will be required to provide performance management information to E2E Service Management.

CSS Service Management Components

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There will be a _Switching Operations_ team appointed that will operate under Licence Obligations introduced by Ofgem.

There will be a new _Switching Service Desk_ that provides a single point of contact to Market Participants for Switching services.

Service Desk and Service Management for Switching will be supported by a system based tool the _CSS Service Management System_ **(**CSMS). Its key purpose is to:

- manage incidents, problems and service requests;
- provide knowledge; and
- co-ordinate Switching Service changes.

The CSS Knowledge Management function will maintain and share knowledge and information within the Service Management System (SMS). It will provide a clear, 'user friendly' comprehensive suite of information that encourages user groups to be self-sufficient.

A secure online _Self Service Portal_ will be provided to enable Switching Users to:

- request services to support their use of Switching;
- raise incidents;
- receive notification of bulletins of Switching availability and scheduled changes.

Regulation

Ofgem has now suggested that creating a dual fuel Retail Energy Code (REC) would be the best option for delivering new governance arrangements for Switching.

The SM obligations on Market Participants and CDS Providers need to be reflected in governance arrangements, to ensure that each party operates effectively and in agreed timescales. This could be done by changing existing industry codes, but would be most easily facilitated by including the Switching Service Management obligations in the REC.

There are obligations that require details to be included in regulatory instruments. These may be included in the REC or specified in REC Code Subsidiary documents, including:

- Incident Management policies, severities and target response & resolution times;
- Detailed obligations and processes for connection to, and use of the CSS Portal;
- Connection rules for accessing and using the Switching Communications Network;
- Detailed Performance Measures e.g.

Whilst the REC will contain the overall Service Management obligations on licensees (e.g. Gas Transporters and Distribution Network Operators), the detailed requirements should be reflected in the contracts for all new and existing CDS providers , along with the Service Levels required. Examples of things to be included are:

- compliance with the REC;
- response and resolution times for Incidents and Service Requests;
- Incident and Service Request reporting;
- definition of the processes and arrangements for impact assessment of any proposed Switching changes;
- Service Availability requirements and performance measurements that apply;
- Change co-ordination and notification requirements.

Including these in REC and CDS providers' contracts will provide for a co-ordinated, consistent approach for Switching.

1. Introduction

Document Purpose

1.1.   The purpose of this document is to define the Service Management Strategy across the End to End Switching Arrangements and to identify the Service Management requirements that must be built into the Switching Service.

Background

1.2.   The current change of supplier processes for gas and electricity operate independently, and are based predominantly on batch systems. Each organisation involved in the process operates its own Service Management processes.

1.3.   The Switching Programme seeks to deliver faster and more reliable switching and will facilitate dual fuel switches. Many of the Switching processes will operate in real time.

1.4.   Successful switching will require a more co-ordinated and integrated Service Management approach.

Goals and Objectives

1.5.   The goals of this Service Management Strategy are to:

- Identify and evaluate the options for Service Management for Switching;
- Select and justify the most appropriate option; and
- Identify the high level requirements for Service Management across the whole E2E Switching Arrangements.

1.6.   The Service Management Strategy will define the overall Service Management capability and how it will operate, how it will be controlled, and identify key systems.

1.7.   It will show the Service Management (SM) options that have been considered and will recommend the option that should be taken forward.

1.8.   The strategy will indicate, at a high-level, the SM interfaces that are required and propose where the requirements should be defined within the regulatory framework.

1.9.   This strategy is designed to ensure the cohesive alignment of people and processes and the integration of the supporting technologies in order to achieve the::

- co-ordination of Service Management;
- quality of services provided;
- reduced risk in service provision; and
- compliance with good practice.

1.10. The approach to SM design for Switching will follow an ITIL-based lifecycle (see section 3 for further information on Service Management and ITIL), to provide the Switching Programme with a set of best practices to manage Switching services, and will consider the full scope of the E2E Switching Arrangements. ITIL has been selected as it provides industry best practice for Service Management.

Associated Products

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

1.12. It also shows the order in which they will be produced. For example the 'Service Management Approach and Methodology' cannot start until the 'Service Management Strategy' has completed.

1.13. This proposed product set is subject to Programme approval.
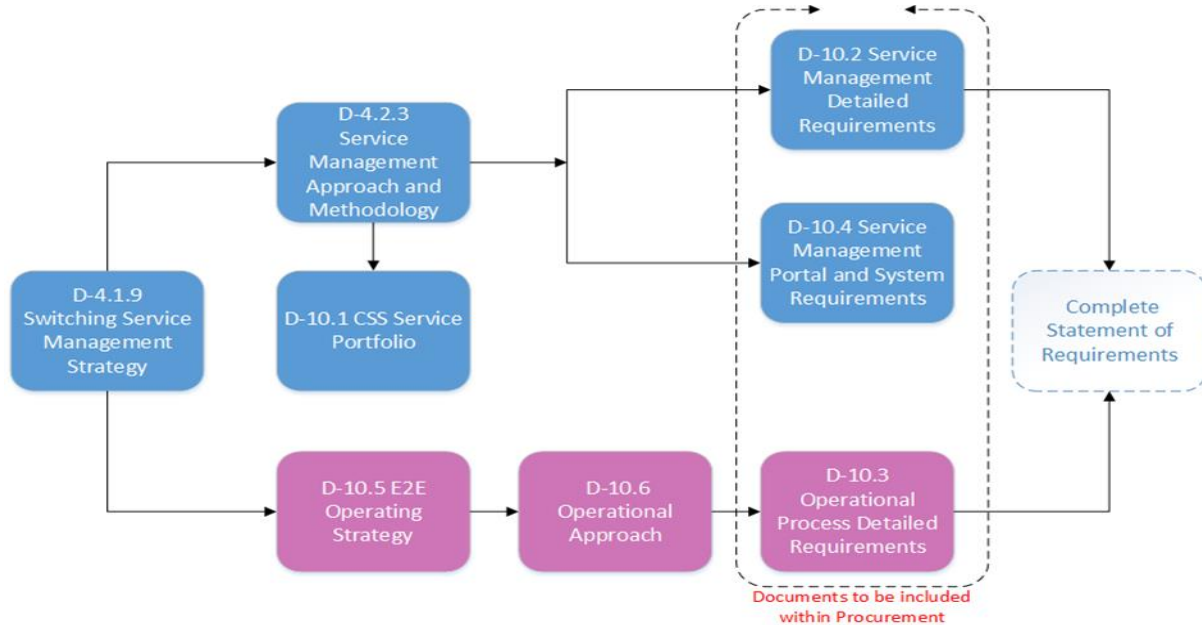
Figure 1 – Service Management and Operations Products

Product Descriptions[1]

Product Name	Type	Description
Switching Service Management Strategy	Service Management	A high level view of Service Management for the Switching Arrangements.
Service Management Approach & Methodology	Service Management	A detailed definition of the Service Management Approach and Methodology.
Service Management Detailed Requirements	Service Management	The detailed requirements for all Service Management functions, for the procurement of CSS services.
Service Management System Requirements	Service Management	The requirements for the underpinning Service Management System (e.g. Remedy) and any User Portal.
CSS Services Portfolio	Service Management	A catalogue of the CSS Services.
Switching Operating Strategy	Operations	The Operations activity required around the CDS providers to ensure that the CSS service is successfully operated and monitored.
Switching Operational Approach	Operations	The Approach for the operational running of Switching using this Service Management Strategy.
CSS Operational Process Detailed Requirements	Operations	The requirements for the operating processes including workarounds and manual processes.

[1] Subject to Programme approval

2. Scope

2.1.   This document defines the Service Management Strategy for the End to End (E2E) Switching Arrangements as shown in Figure 2 below.
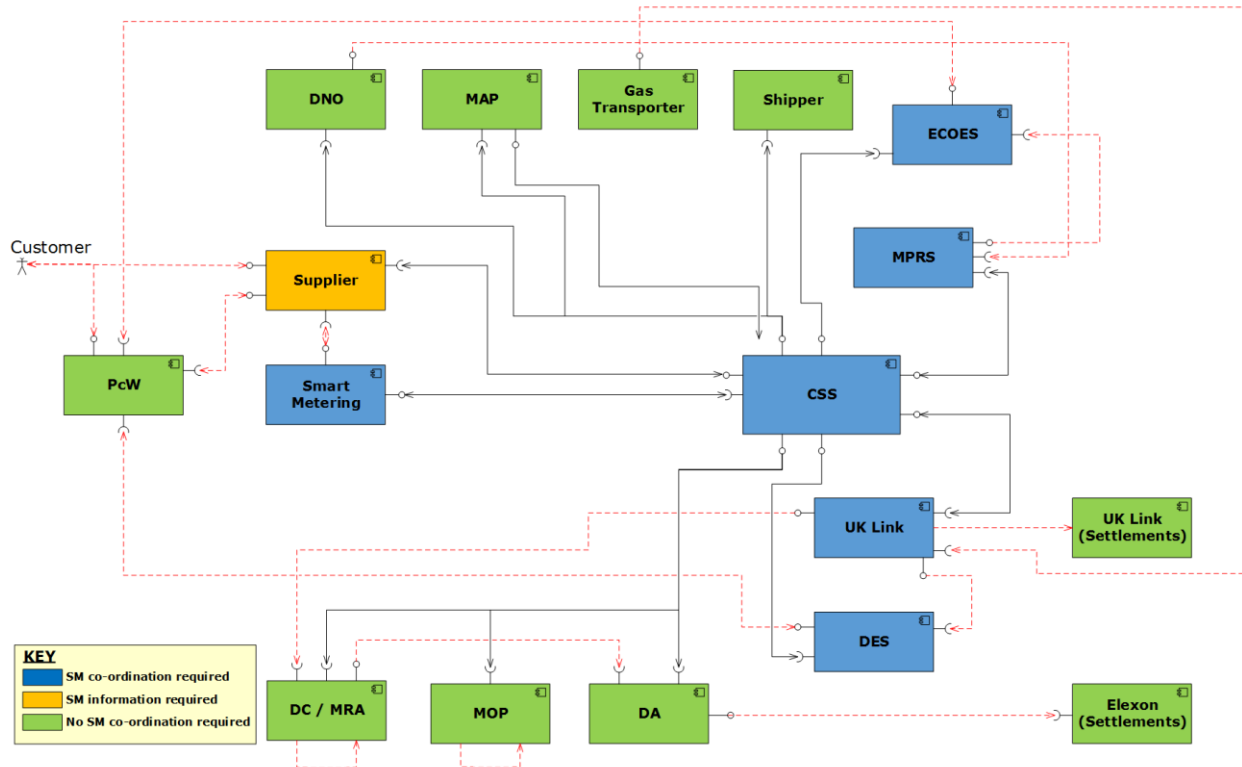
Figure 2 – E2E Switching Arrangements

2.2.   The E2E Switching Arrangements have been analysed in order to determine where co-ordinated or common Service Management should be considered.

2.3.   This Service Management Strategy identifies the high level Service Management requirements across the E2E Switching Arrangements that will have an impact on Market Participants.

2.4.   The following areas are covered:

- the services identified as key to performing a successful Switch;
- CDS Providers that are responsible for the Service Management of the identified key services;
- E2E and CSS Service Management processes;
- requirements to be placed on existing Central Data Service Providers;
- requirements to be placed on new CSS Service Providers.

2.5.   The output from this product will feed into the "Service Management Approach and Methodology" and the "Detailed Service Management Requirements for the Central Data Services" products. It will also feed into the procurement of the Central Switching Service (CSS) providers.

2.6.   This document may make reference to touch-points between existing Central Data Service providers and Market Participants but will not detail service providers or market participant internal Service Management processes and procedures.

2.7.   The following areas are not covered in this document:

- services identified that are not seen as key to completing a successful Switch;
- service provider or market participant internal Service Management processes and procedures;
- defect management techniques for use in the design, build and test phase of the Programme;
- Customer Enquiry Service internal Service Management processes and; procedures for providing Supplier and MPxN information to Consumers; and
- interactions between energy suppliers and their appointed Supplier Agents.

The interactions between an Energy Supplier and its Supplier Agents with regard to appointments are the responsibility of the Energy Supplier to design and agree. This will remain the same in the new Switching Arrangements. However, to improve the overall Switching experience for consumers, Market Participants are advised to follow best practice service management guidelines for their processes.

3. What is Service Management?

Overview

3.1.   Service Management is the implementation and management of quality services, directed by policies, to meet the needs of the business. Its purpose is to enable an organisation to plan, design, deliver, operate and control services offered to its "customers" (in the case of Switching, its Market Participants).

3.2.   It is provided by IT service providers through an appropriate mix of people, processes and information technology.

3.3.   The Service Management methodology for Switching includes services and systems sourced from a number of service providers and will support cross-functional, cross-process, and cross-provider integration. It creates an environment where all parties:

- know their roles and responsibilities in the ecosystem;
- are empowered to deliver;
- are held accountable for the outcomes they are required to deliver.

3.4.   The Switching Service Management model, is a single, logical function that is held accountable for the end to end coordination of Service Management processes.

3.5.   The aim is to provide an effective cross-service provider operation, making sure that all service providers contribute to the successful management of the end to end switching service.

Service Management Objectives

3.6.   The key objectives of Service Management are to ensure that solutions are designed, built, tested, implemented and operated across the Switching ecosystem in alignment with the respective Service Providers, including to:

- ensure the strategy adopts **ways of working aligned to best practice**, and uses common terminology and methodologies to enable the effective management of the inter-service dependencies;
- develop a strategy that enables the **effective management of services** across the entire Switching ecosystem; this applies to services that span multiple Service Providers where no single Service Provider will have direct contractual responsibility for the full end-to-end service;
- **federate** Service Management across the Central Data Service providers and Service Users. Internally, organisations will have their own structured Service Management functions. Externally, they will interoperate through a set of common standards and processes;
- ensure the strategy preserves the basic principles of collaboration and effective working across the **Service User/Service Provider Relationship**;
- define and agree c**ommon aspects** of the CSS Service Management Strategy at the outset and ensure there will not be several alternative ways of interoperating;
- ensure a **culture of ambition, collaboration, transparency**, accountability and integrity is embedded with respect to Service Management;
- be **Service User focused** paying due consideration to the needs of the CSS Users throughout the Service Management lifecycle.

Service Management Standards

3.7.   Service Management for Switching will follow an ITIL-based lifecycle and will be managed by a set of ITIL Processes, Procedures and Work Instructions as well as some

additional non-ITIL related processes where the ITIL framework does not fully cover the needs of the business.

ITIL and ITSM

3.8.   IT service management (ITSM) is what is done to manage the services that are delivered to customers. **ITIL** (previously known as the Information Technology Infrastructure Library) is a best practice framework for ITSM.

3.9.   ITIL is owned by the Cabinet Office (part of HM Government), and gives guidance on the provision of quality IT services and the processes, functions and other capabilities needed to support them. It focuses on aligning IT services with the needs of business.
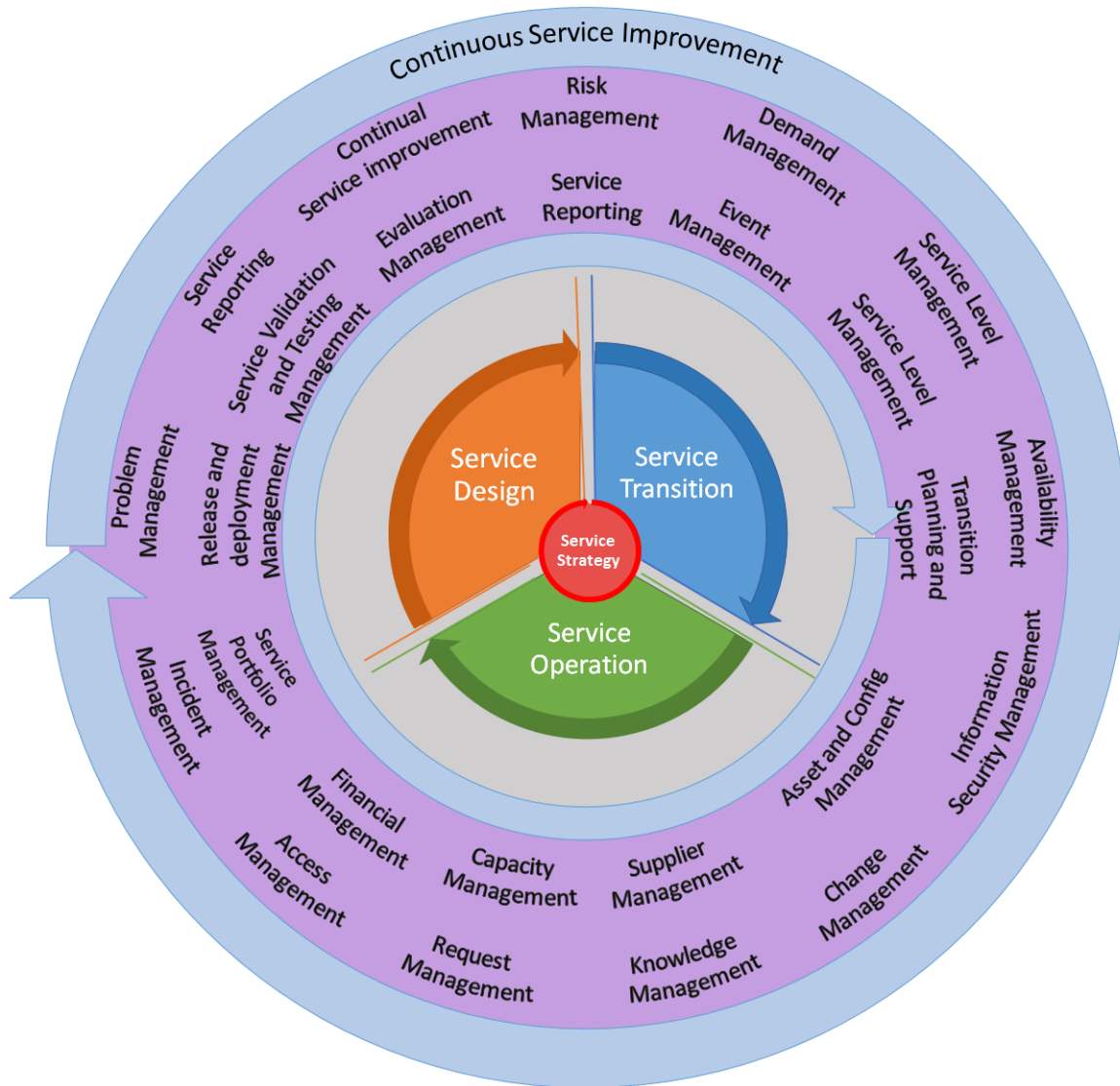

Figure 3 – The ITIL Framework

3.10.   The ITIL framework is based on a service lifecycle and consists of five lifecycle stages (Service Strategy, Service Design, Service Transition, Service Operation and Continual Service Improvement), each of which has its own supporting publication.
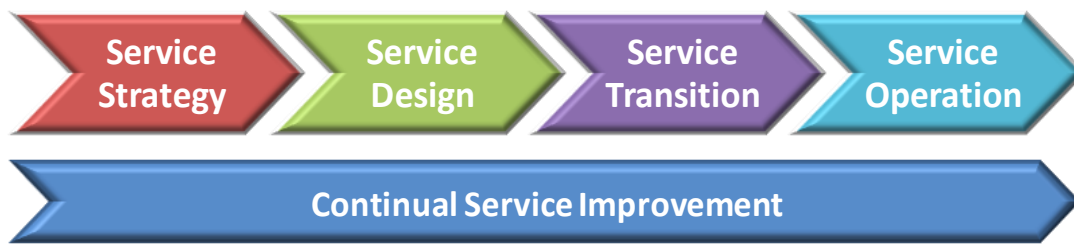
3.11.   This is shown in Figure 4.

Figure 4 – The ITIL Stages

3.12.   This Switching Service Management Strategy and the subsequent Service Management documents will define how the ITIL framework will be applied and how alignment will be maintained.

Service Management Terminology

3.13.   ITIL uses a set of terminology that most individual organisations would recognise.

3.14.   However, in the energy industry, because of the significant number of different Codes, Service Providers and Market Participants, use of some of the standard ITIL terms are likely to cause confusion.

3.15.   Where this is the case, this Strategy has replaced the ITIL terminology with less contentious and confusing terms.

3.16.   For example:

3.17.   Under ITIL, *Change Request* would refer to the notification of a proposed change for consideration and agreement. Proposed changes would be managed by a *Change Advisory Board* (CAB) that considers and agrees the timing of the change implementation, and this whole process would be referred to as *Change Management*.

3.18.   These terms are used in Gas Governance to cover and manages changes to the Gas Industry Codes.

3.19.   Therefore for Switching, this Strategy will use the following terms for Change:

- **Change Notification** – instead of Change Request – where a CDS will notify Switching Operations (via Service Desk or the Service Management System) of a proposed system outage;
- **Change Co-ordination** – for the process run by Switching Operations to co-ordinate and agree proposed system outages;
- **Change Co-ordination Group** – for the group that has the authority to accept and schedule Switching-related changes (e.g. planned downtime and software updates. This is separate from the Code Bodies that would approve changes to Industry Codes.

3.20.   ITIL also uses the term Supplier Management for activities that monitor and manage the provision of services. The use of the word 'Supplier' is confusing, as the energy industry uses the term Supplier to describe the organisation that provides gas or electricity to consumers. This document will therefore use the term 'Service Provider' instead of Supplier.

4. Service Management and Switching

Service Management Today

4.1.   At present, each Central Data Service (CDS) and its provider has its own set of Service Management processes and is responsible for regulating and coordinating various aspects of the switching process, in line with the appropriate Industry Codes.

4.2.   A complicated E2E systems/application landscape exists to support the current arrangements in which many different technologies, products and systems must interact.

4.3.   The existing switching arrangements and many of the processes and technical systems that underpin them, have been in force since 1998.

4.4.   Although there are commonalities between the gas and electricity Service Management processes, they are governed by different regulatory frameworks which are in turn enacted and enforced by a range of industry bodies.

4.5.   Figure 5 illustrates the current Service Management model and the interdependencies between the actors involved in the current switching arrangements for gas and electricity.
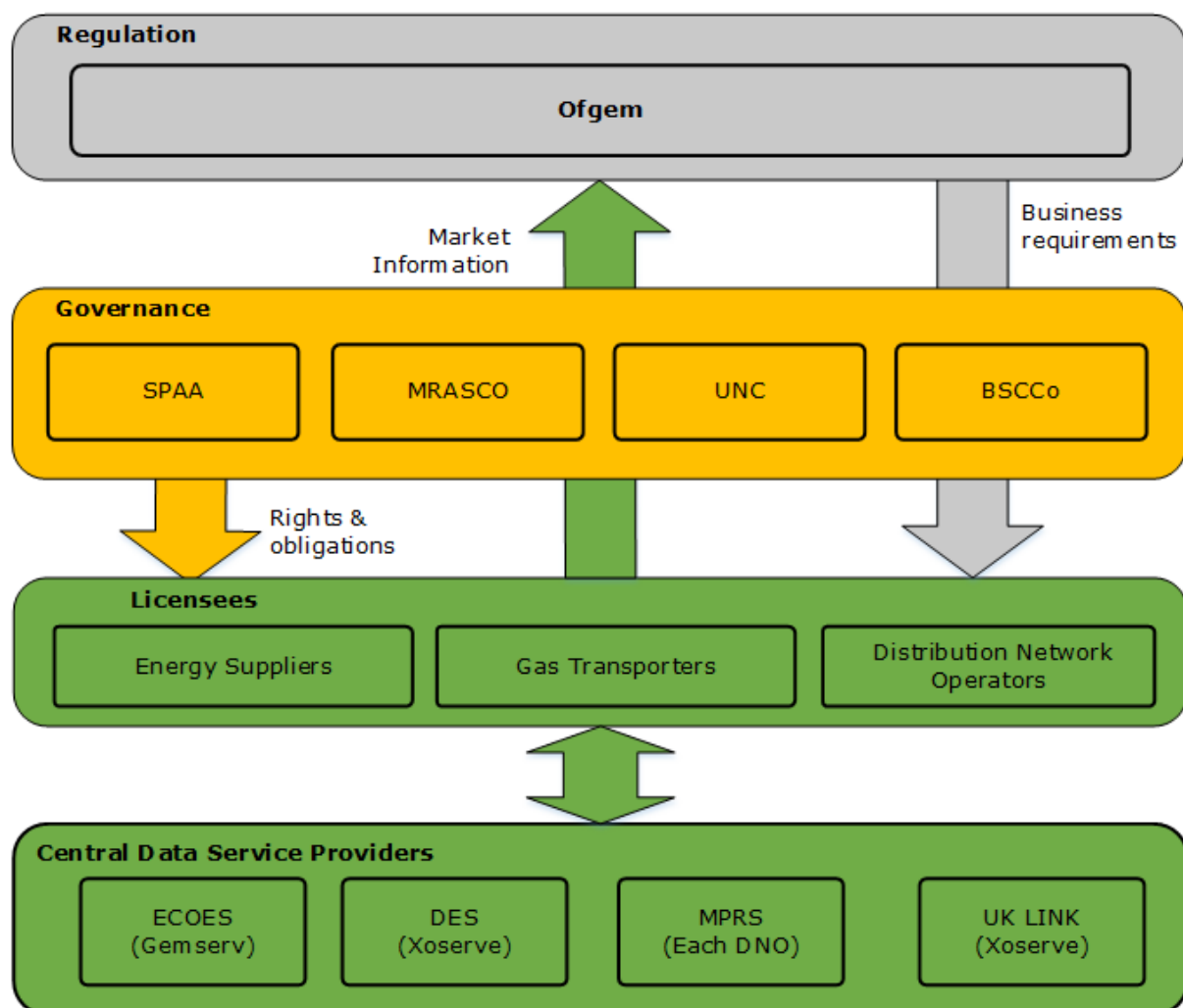
Figure 5 – Service Management Today

Regulation Layer

4.6.   The regulation layer provides the regulatory framework within which switching must operate. It is provided by:

- **Office of Gas and Electricity Markets (Ofgem)** – Sets the regulatory (licence) framework within which the Switching Arrangements operate;
- **Governance** – The governance bodies are responsible for the administration and governance activities required for the gas or electricity markets. The governance layer is provided by:
  - **BSCCo (ELEXON)** administers the Balancing and Settlement Code (BSC) – a legal document which defines the rules and governance for the balancing mechanism, imbalance and settlement processes of electricity in Great Britain;
  - **MRASCo (Gemserv)** administers the Master Registration Agreement (MRA) – an industry-wide agreement that provides a governance mechanism to manage the processes established between electricity suppliers and distribution companies to enable electricity suppliers to transfer customers;
  - **ElectraLink** administers the Supply Point and Administration Agreement (SPAA) – an inter-operational arrangement between gas suppliers and transporters in the UK retail market.
  - **Joint Office** administers the Uniform Network Code (UNC)

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Current Central Data Service (CDS)[2] Providers

4.7.   Ofgem in its regulatory role sets the business requirements for Energy Suppliers, Gas Transporters and Distribution Network Operators and details these as conditions in the appropriate Licence.

4.8.   The Industry Codes define additional and more detailed obligations that apply to Licensees and Other Interested Parties.

4.9.   Whilst responsibility remains with the Licensee, many of these Licence Conditions and Code Obligations are actually undertaken by service providers that operate systems on behalf of multiple Licensees.

4.10.   Each service provider for both the Gas and Electricity industries has its own set of Service Management processes to meet the requirements of the relevant industry bodies and the appropriate Licensees.

4.11.   In the Switching space, the services and service providers are:

- **Electricity Central Online Enquiry Service** (ECOES) – Gemserv provides a national database and enquiry service for electricity meter point information and associated data.
- **Data Enquiry Service** (DES) – Xoserve provides a national database and enquiry service for gas meter point information & associated data.
- **Meter Point Administration Service** (MPAS) – Each Distribution Network Operator (DNO) has its own database of electricity meter point registration data for its meter points, and each MPAS processes supplier switching related data flows.
- **UK Link** – Xoserve provides a suite of systems that support the gas market, including registration, meter technical details, commercial balancing of the gas network, and transportation and energy charging to shippers. Xoserve also

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[2] Central Data Services (CDS) are Xoserve, MPAS, ECOES and DES

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provides a master database of gas meter point registration data, and processes supplier switching related data flows.

5. Service Management Model for Switching

5.1.   The "To-Be" solution will aim to provide simplification in the E2E Service Management ecosystem where feasible and will create a point of central coordination for all Market Participants within the Switching Arrangements across both gas and electricity.

5.2.   In order to move to a reliable and faster switching service the following will need to be addressed:

#	Description	Consequence
Issue #1	Individual Service Providers can act independently with no overall coordination.	• There would be no co-ordinated E2E resolution of incidents that affect more than 1 CDS • Some problems are likely to fall in between CDSs if the hand-offs are not managed with the result that issues may not get resolved • Dual fuel switching and 'OFAF' would not be co-ordinated.
Issue #2	Individual Service Providers fulfilling their contractual obligations do not provide assurance that the end to end Switching service delivered to the users and consumers will be acceptable.	• The SLAs and timings covered in each CDS provider contract may not be compatible with those that they interface • Individual contract arrangements may not enable the overall desired Switching timings to be achieved.
Issue #3	Measuring the E2E Switching service availability or performance is not currently monitored or tracked.	• There would be no overall monitoring of the E2E service or metrics of Switching performance. • It would be difficult to identify where delays or bottlenecks occurred.

5.1.   Failure to address these issues will affect the ability to deliver a faster, reliable Switching experience to consumers.

What are the risks of not implementing Service Management?

5.2.   Switching Service Management is the Service coordination layer of the E2E Service Management model and is required to ensure the Switching CDSs provide IT Services to meet the needs of the Ofgem Programme and Energy consumers.

5.3.   Without a centralised Switching Service Management function, coordinating activities will leave the Switching service without E2E Service ownership or responsibility to ensure the E2E Switching Service meet agreed SLAs. This could lead to energy consumer dissatisfaction and the loss of confidence in Switching.

5.4.   Without a centralised function there will be no:

• Single point of control across the e2e Switching Arrangements;

• End-to-end accountability for services across the e2e Switching Arrangements;

• Consistent governance, management, and co-ordination of activities across the e2e Switching Arrangements;

5.5.   There will also be limited visibility across the e2e Switching Arrangements to identify areas of improvement.

5.6.   A centralised Service Management function will create an environment where all parties:

- Know their role, responsibilities in the ecosystem;
- Are empowered to deliver;
- Are held accountable for the outcomes they are required to deliver;
- Have a common way of working;
- Improve collaboration across business functions.

5.7.   SM will be accountable for:

- Collating Switching service details to form a single source of information;
- Understanding and anticipating demand for services;
- Highlighting the e2e availability of Services;
- Communicating the effects of a CDS failure;
- Coordinating of activities that span multiple Service Providers;
- Collating Switching service key performance indicators;
- Performing Service measurement to identify areas of improvement;
- Conduct service reviews to identify improvements to the end 2 end service.

5.8.   Identified risks are:

- Service affecting Incidents will occur and may or may not be communicated,
- System changes could be completed without any impact analysis and may result in service failure;
- No accountability for the e2e Switching service
- No responsibility for Incident and problem resolution
- No improvement activities to improve the e2e Switching service

What Service Management is required?

5.9.   Key features of the Central Switching Service are:

- the proposed timescales for Switching a consumer's energy supplier are significantly shorter than currently;
- CSS delivers dual-fuel switching;
- a 'one fail, all fail (OFAF)' facility is supported;
- accurate and consistent address data;
- shorter objection windows.

5.10.   Many of these features will only be possible if all parties involved in Switching work together and any issues that occur are promptly resolved.

5.11.   Furthermore:

- additional service providers will be introduced to deliver new CSS functionality
- some of the interfaces between existing CDSs and CSS will be real-time rather than batch.

5.12.   Industry best practice proposes a co-ordinated service management approach to manage these complexities, and the ITIL lifecycle is based on this.

5.13.   **Incident**, **Request** and **Problem Management** across Switching are key to delivering faster Switching timings.

5.14.   Even if the number of Switches does not increase overall, the timescales for processing switches are significantly shorter which will increase the demand on CDSs requiring **Demand** and **Capacity Management**.

5.15.   A successful switch relies on the availability of all of the CDSs and the effective interaction between them, requiring **Availability Management**, **Change Co-ordination**, **Major Incident Management** and effective **Business Continuity** plans to minimise periods of down-time.

5.16.   **Service Monitoring**, **Service Provider Management** and **Reporting** are essential to identify bottlenecks, service provider performance and whether Switching is delivering as expected.

High-level Switching 'To-Be' Model

5.17.   The 'To be' model adds an E2E Service Management layer to the current model (Figure 5) to create the proposed model shown in Figure 6. Further details of SM processes can be found in section 6 and Appendix 2 –Service Process Definitions
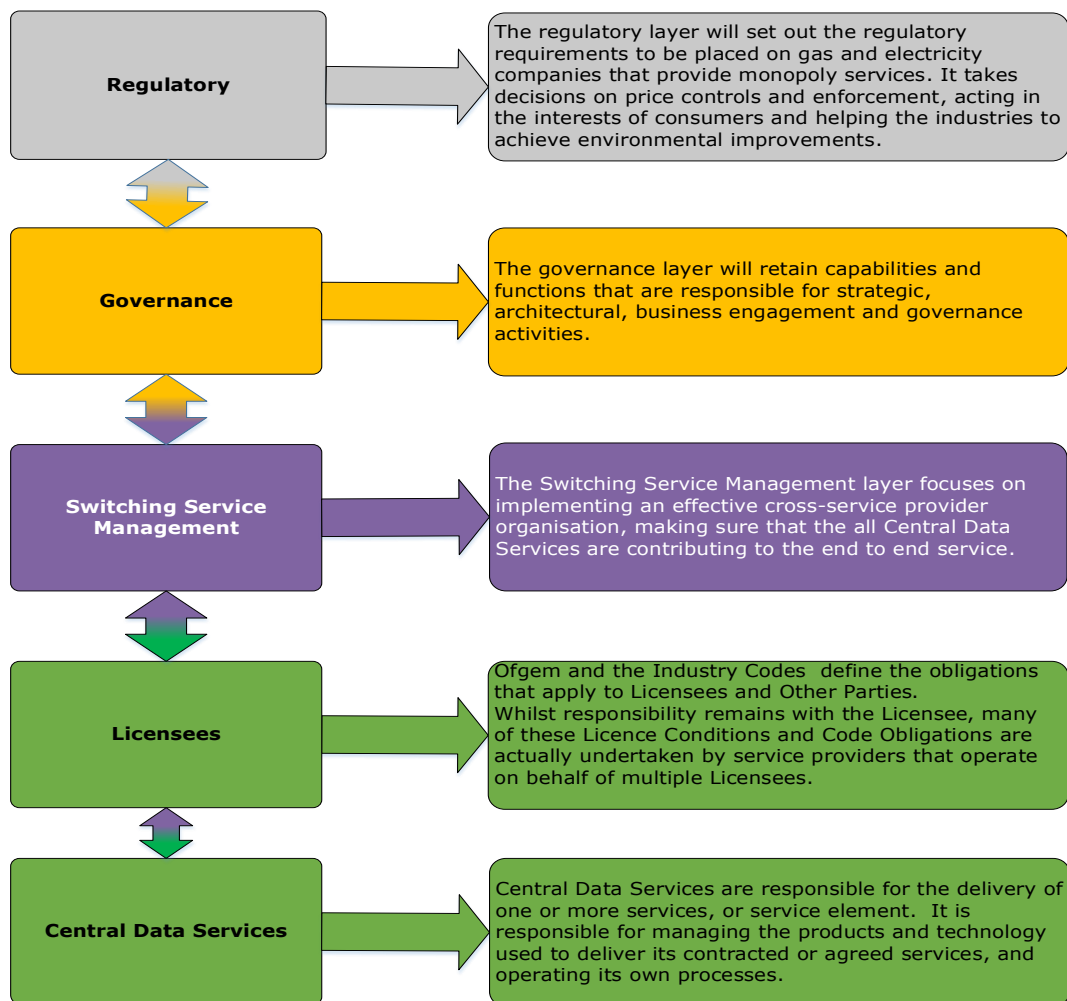

Regulatory

The regulatory layer will set out the regulatory requirements to be placed on gas and electricity companies that provide monopoly services. It takes decisions on price controls and enforcement, acting in the interests of consumers and helping the industries to achieve environmental improvements.

Governance

The governance layer will retain capabilities and functions that are responsible for strategic, architectural, business engagement and governance activities.

Switching Service Management

The Switching Service Management layer focuses on implementing an effective cross-service provider organisation, making sure that the all Central Data Services are contributing to the end to end service.

Licensees

Ofgem and the Industry Codes define the obligations that apply to Licensees and Other Parties.
Whilst responsibility remains with the Licensee, many of these Licence Conditions and Code Obligations are actually undertaken by service providers that operate on behalf of multiple Licensees.

Central Data Services

Central Data Services are responsible for the delivery of one or more services, or service element. It is responsible for managing the products and technology used to deliver its contracted or agreed services, and operating its own processes.

Figure 6 – High Level "To be" Service Management Model

5.18.   There are now four layers in the model:

- Regulation;
- Governance;
- Service Management;
- Licensees and Service Provider Services.

5.19.   Each layer has a role as part of effective end to end management of services and the delivery of maximum value. Each layer should have sufficient capability and maturity to fulfil its role.

6. Service Management Processes

6.1.   The Service Management processes covered by ITIL are shown in Figure 7.
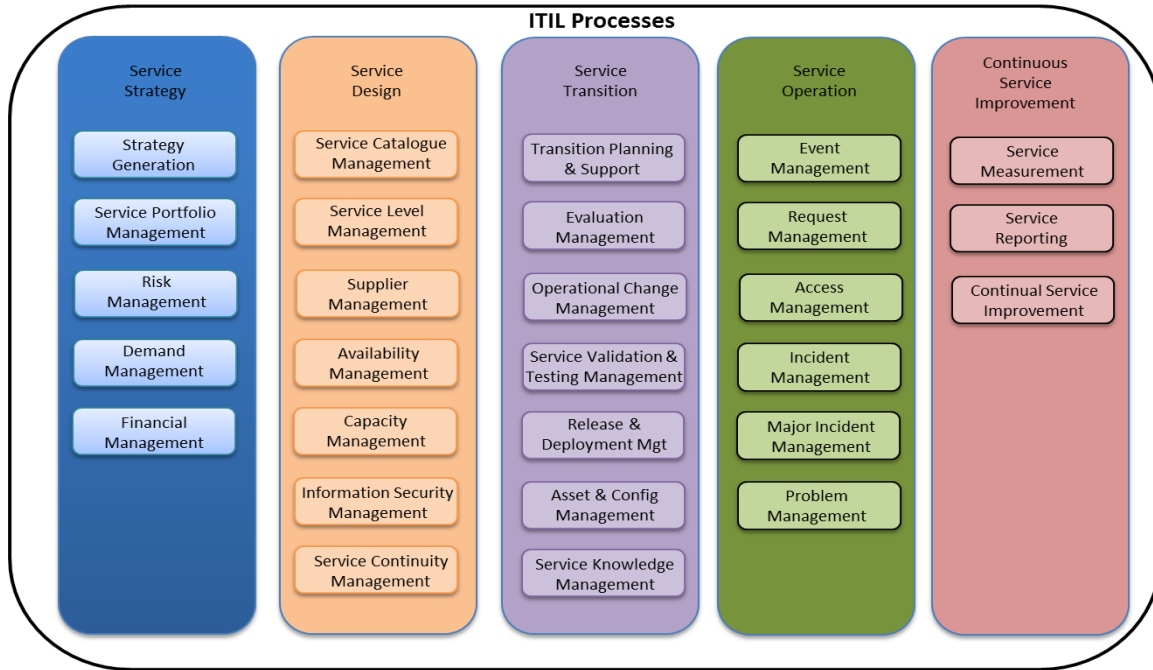

Figure 7 – ITIL Processes

Stage	Description
Service Strategy	Service Strategy defines the perspective, position, plans and patterns that a service provider needs to execute to meet business outcomes.
Strategy Management	The definition and maintenance of an organisation's perspective, position, plans and patterns with regard to its services and the management of them.
Service Portfolio Management	This ensures that the service provider has the right mix of services to meet required business outcomes.
Risk Management	The identification, assessment and controlling of risks
Demand Management	The understanding, anticipating and influencing of customer demand for services. Works alongside Capacity Management.
Financial Management	The management of an organisation's budgeting, accounting and charging requirements.
Service Design	Design of services, governing practices, processes & policies to realise the strategy & facilitate the introduction of services into supported environments.
Service Catalogue Management	The catalogue of both customer-facing services that and supporting services.
Service Level Management	The negotiation of achievable service level agreements and ensuring that these are met.
Supplier Management	Ensuring that all contracts and agreements with suppliers support the needs of the business, and that suppliers meet their contractual commitments.

Stage	Description
Availability Management	This defines, analyses, plans, and measures and improves all aspects of the availability of IT services.
Capacity Management	Ensuring that the capacity of IT services and infrastructure is able to meet agreed capacity and performance
Information Security Management	Ensuring that the confidentiality, integrity and availability of an organisation's assets, information, data & IT services match the agreed business needs.
Service Continuity Management	This ensures that the IT service provider can always provide minimum agreed service levels.
Service Transition	Ensures that new, modified or retired services meet the expectations of the business.
Transition Planning & Support	Planning all service transition processes and coordinating the resources that they require.
Evaluation Management	Formal assessment of a new or changed service to help determine whether to authorise the change.
Operational Change Management	Controlling of all changes, enabling beneficial changes to be made with minimum disruption, supported by a CAB.
Validation & testing Management	Ensures that the IT service matches its specification and will meet the business need.
Release & Deployment Management	The planning, scheduling and controlling of the build, test and deployment of releases
Asset & Configuration Management	Ensuring that the assets required to deliver services are properly controlled and managed.
Knowledge Management	The sharing of perspectives, ideas, experience and information, support by a Knowledge Management tool.
Service Operation	Coordination & carrying out of activities & processes to deliver & manage services at agreed levels to users & customers.
Event Management	The management of significant events throughout their lifecycle.
Request Management	The management of all service requests using agreed steps to fulfil.
Access Management	Allowing users to make use of IT services, data or other assets according to information security policy.
Incident Management	The management of all incidents to ensure that normal service operation is restored as soon as possible.
Problem Management	The proactive prevention of incidents from happening and minimising the impact of incidents that cannot be prevented.
Continuous Service Improvement	Ensuring that services are aligned to changing business needs. Performance is measured & improvements made to increase efficiency, effectiveness & value.
Service Measurement	The creation and assessment of Key Performance Indicators to measure the achievement of critical success factors.
Continual Service Improvement	The recording and management of improvement opportunities, supported by a CSI register.
Service Reporting	The production and delivery of reports of achievement and trends against service levels.

6.2.   See Appendix 2 –Service Process Definitions for further details.

Which SM Processes does Switching need?

6.3.   Switching will benefit from the full range of ITIL service management processes.

6.4.   However, some of these processes will be required to a greater level of detail than others, see section 9.

6.5.   Also, there are options around the degree to which the SM of all organisations should be integrated.

Detailed Switching Service Management Model

6.6.   The Detailed Switching Service Management Model is shown below in Figure 8. This shows the specific processes that will apply.
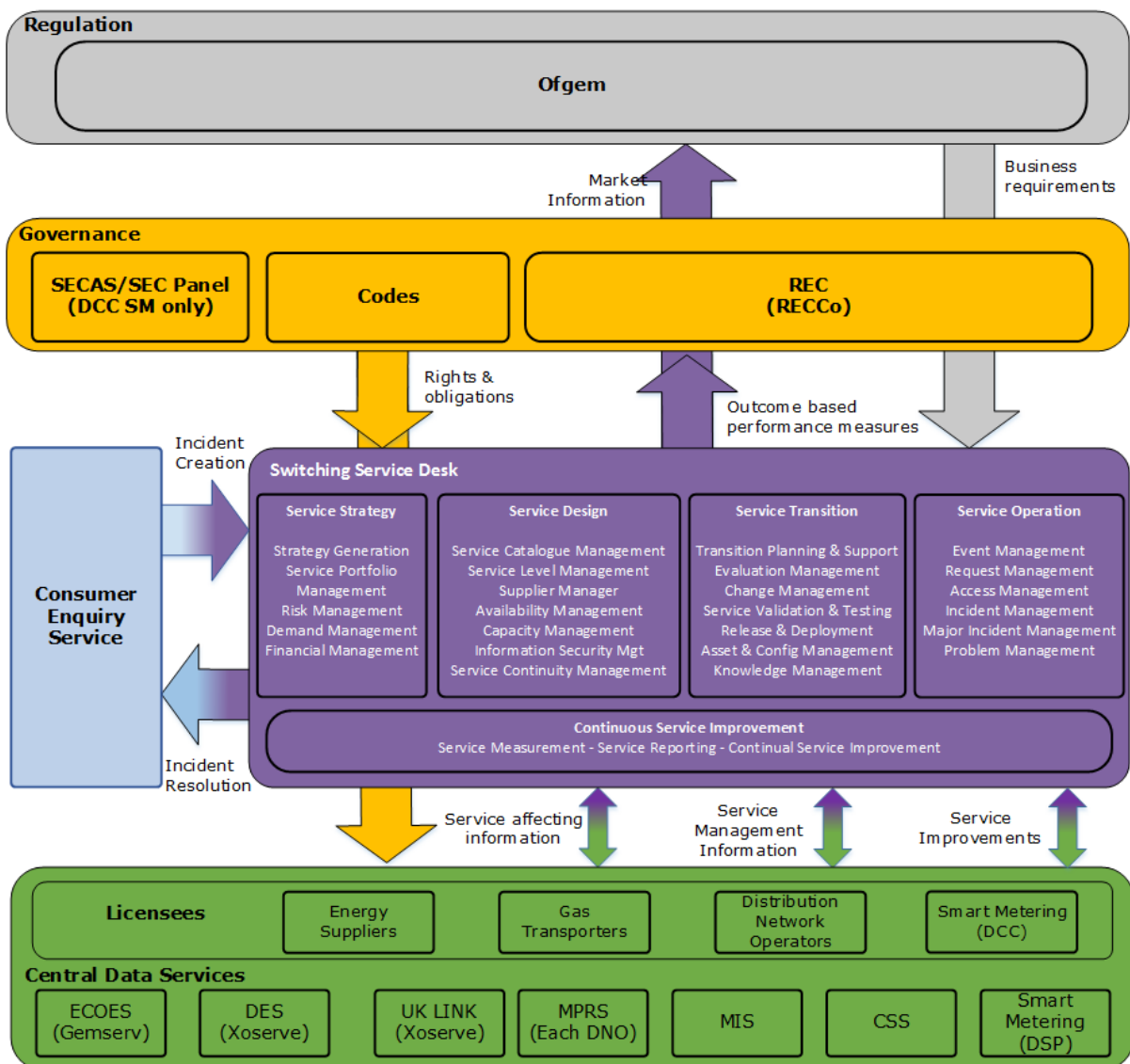

Figure 8 – Detailed Switching Service Management Model

Regulation

6.7.   The regulatory layer will retain the capability to regulate monopoly companies which run the gas and electricity networks and to licence energy suppliers. It takes decisions on price controls and enforcement, acting in the interests of consumers and helping the industries to achieve environmental improvements.

Governance

6.8.   The governance layer will retain administration and governance activities required for the gas and electricity markets.

6.9.   The existing codes that hold Service Management obligations could be merged into a single governing document but this is still being consulted on. Merging the Service Management obligations into a single document to form a single source of information will be beneficial to the Switching arrangements and provide clear understanding of requirements. Ofgem is minded to introduce a new Retail Energy Code (REC) for Switching. This will merge the Service Management obligations into a single governing document (see section 0).

Switching Service Management

6.10. The E2E Service Management layer covers the processes put in place to manage the Switching service across multiple IT and business service providers to deliver an efficient Switching service to the industry.

6.11. Service Management will be managed by the Switching Operations Service Management team who will have the responsibility of effectively and efficiently managing the coordination of the E2E Switching Arrangement services.

6.12. Further details of the Service Management layer will be found in section 9 and in the subsequent document 'Service Management Approach and Methodology'.

CDS Providers

6.13. Each Service Provider is responsible for its component parts of the E2E Switching Arrangements and will manage its own services, technology and tooling to support its services.

6.14. The E2E Service Management will require the provision of appropriate tooling, diagnostic and reporting capabilities from each of the Service Providers so that an effective service, with appropriate levels of service capability and the ability to meet the Service Level Agreements is achieved.

6.15. Each service provider will be required to coordinate a number of Service Management processes which is covered in section 8.

6.16. The provider of the Customer Enquiry Service will be responsible for its own set of service management processes to support consumers but will be required to provide performance management information to E2E Service Management.

7. Switching Service Management Options

7.1.   Whilst it has been identified that all Service Management processes should apply for Switching, there are a number of ways that this can be delivered.

7.2.   An option analysis has been undertaken and 3 options considered (see 'Options Considered' below)

7.3.   Whichever option is selected, switching users and interested parties will be able to get the support and information they require, although whether there is a single source of information will depend on the option selected.

7.4.   Currently each CDS provider has implemented its own Service Management processes to meet regulatory and licence requirements and to meet the needs of its users.

7.5.   Each CDS has determined the level of Service Management that is required, and how information is made available to its users.

7.6.   Much of the current processing is done overnight in batch to meet lengthy industry timescales and operates for gas and electricity independently.

7.7.   Whichever option is selected, the existing CDSs will need to review their current arrangements and ensure they are appropriate and able to support the faster switching timescales that are required.

Options Considered

7.8.   Three key options have been evaluated and considered in this strategy. The options have been considered for their:

- Impact on Customers;
- Impact on Market Participants;
- Impact on Delivery, Costs and Risks.

Option 1 – Each organisation operates SM independently

7.9.   Each existing CDS would determine the processes that it needed to operate to meet the Switching Service Management requirements.

7.10.   New CSS service providers would develop processes to meet the requirements specified by the Switching Programme.

Pros

- This would be the cheapest and least effort option to implement as existing CDSs would not need to make many changes to systems or processes to support switching, co-ordinate with other service providers or provide information to the Switching Operator.

Cons

- There would be no single point of information or contact for Switching Market Participants. Participants would need to use a variety of sources to:
  - find out the availability and forward schedule of change for systems involved in switching;
  - identify the source of an issue;
  - raise an Incident and track its progress;
  - request services;
  - receive information about switching progress;
  - provide demand forecasts.

- This is the high risk option, with a key risk that faster and reliable switching would not be achieved as the co-ordination between CDSs and the swift resolution of issues would not take place and delays may occur;
- There may be delays in completing a customer's switch;
- There would be no co-ordination or resolution of Incidents that required involvement of multiple parties;
- There would be no end to end service metrics or reporting.

Option 2 – Service Management processes are standardised and integrated for Switching for all CDSs

7.11. Delivery of the Service Management requirements would be standardised for all CDS providers using common Service Managements Systems, Portal and Processes.

Pros

- There would be a fully integrated and co-ordinated Service Management approach that would:
  - Provide a view of all Switching systems availability in one place;
  - Show the forward schedule of change for all components in one place;
  - Provide a single point of contact for all switching matters;
  - Enable Incidents to be resolved as quickly as possible by the responsible organisation.
- Switching participants would be able to:
  - See all Incidents and the status of each in one place;
  - Use a single Portal to request services;
  - Plan their submission of switches around system availability;
  - Notify a single point of contact of its switching demand;
  - Notify a single source of any issues that it was experiencing with its own systems.
- Provide the best service to the customer and the most likely completion of the switch on the correct day.
- Provide a single method of operation for the Switching Service Desk.
- Provide E2E overall Service Management metrics e.g. Incidents raised, availability etc.
- Provides the most automated solution and the easiest to operate for the Service Desk with little manual activity required.
- Be the least risk option to a successful Switch.

Cons

- This would be the most expensive and disruptive option to implement as each CDS would have to make significant changes to implement the standardised systems and processes. The costs are expected to be significantly higher and many system changes would be required;
- There is also a risk that the changes may not be able to be implemented in the required timescales, so could affect the go live of the E2E Switching Arrangements.

Option 3 – Key SM processes are integrated. Others are co-ordinated and some operate independently

7.12. This option is a balance between options 1 and 2.

7.13. Each Service Management process would be individually assessed to identify whether a common approach (use of a single system), a co-ordinated approach (data or information shared with a central source) or no commonality is required. This will be covered in the subsequent 'SM Approach and Methodology' document.

7.14. The term 'Common Approach' would use the same processes and systems, whereas a 'Co-ordinated Approach' would use separate systems, but co-ordinated processes and interfaces to ensure consistency. A good example where 'no commonality' is required would be access management, where there is no benefit for directing access requests for UK Link or ECOES through the Switching Service Desk.

7.15. Changes to CDS systems to use a common solution would only be required where there is real benefit in doing do.

7.16. Processes may need to be changed to pass information to the Switching Operations team, either automatically or manually.

7.17. This option would only require changes where there were benefits to be achieved.

Pros

- This option would still enable a single point of contact to Market Participants, being carried out between the CDSs and Switching Operations.
- The Switching Portal would provide information on the availability of all Switching components.
- Incidents would be managed by the Central Switching Service Desk and passed (behind the scenes) to the appropriate party for resolution.
- Changes would only be made to CDS systems where they could be justified.
- Would provide all the benefits of option 2, without all the disadvantages of option 1.

Cons

7.18. This option would:

- require a number of manual interventions to ensure the availability of all the data and information needed to provide a single port of call to Market Participants.
- require existing CDSs to make some changes to its Service Management solutions and processes.
- depend on manual rather than automated activity thereby reducing the reliability.

7.19. This is shown in a table overleaf for easy comparison:

Option	1	2	3
Description	Each organisation operates SM independently	Service Management processes are standardised and integrated for Switching for all CDSs	Key SM processes are integrated. Others are co-ordinated and some operate independently

Pros	• This would be the cheapest and least effort option to implement as existing CDSs would not need to make many changes to systems or processes to support switching, co-ordinate with other service providers or provide information to the Switching Operator.	• There would be a fully integrated and co-ordinated Service Management approach that would:
		  • Provide a view of all Switching systems availability in one place;
		  • Show the forward schedule of change for all components in one place;
		  • Provide a single point of contact for all switching matters;
		  • Enable Incidents to be resolved as quickly as possible by the responsible organisation.
		• Switching participants would be able to:
		  • See all Incidents and the status of each in one place;
		  • Use a single Portal to request services;
		  • Plan their submission of switches around system availability;
		  • Notify a single point of contact of its switching demand;
		  • Notify a single source of any issues that it was experiencing with its own systems.
		• Provides the best service to the customer and the most likely completion of the switch on the correct day.
		• Provide a single method of operation for the Switching Service Desk.
			• This option would still enable a single point of contact to Market Participants, being carried out between the CDSs and Switching Operations.
			• The Switching Portal would provide information on the availability of all Switching components.
			• Incidents would be managed by the Central Switching Service Desk and passed (behind the scenes) to the appropriate party for resolution.
			• Changes would only be made to CDS systems where they could be justified.
			• Would provide all the benefits of option 2, without all the disadvantages of option 1.

Option	1	2	3
		• Provide E2E overall Service Management metrics e.g. Incidents raised, availability etc. • Provides the most automated solution and the easiest to operate for the Service Desk with little manual activity required. • Be the least risk option to a successful Switch.	

Cons	• There would be no single point of information or contact for Switching Market Participants. Participants would need to use a variety of sources to:
	  • find out the availability and forward schedule of change for systems involved in switching;
	  • identify the source of an issue;
	  • raise an Incident and track its progress;
	  • request services;
	  • receive info about switching progress;
	  • provide demand forecasts.
	• This is the high risk option, with a key risk that faster and reliable switching would not be achieved as the co-ordination between CDSs and the swift resolution of issues would not take place and delays may occur;
	• There may be delays in completing a customer's switch;
	• There would be no co-ordination or resolution of Incidents that required involvement of multiple parties;
	• There would be no end to end service metrics or reporting.
		• This would be the most expensive and disruptive option to implement as each CDS would have to make significant changes to implement the standardised systems and processes. The costs are expected to be significantly higher and many system changes would be required;
		• There is also a risk that the changes may not be able to be implemented in the required timescales, so could affect the go live of the E2E Switching Arrangements.
			• requires a number of manual interventions to ensure the availability of all the data and information needed to provide a single port of call to Market Participants.
			• requires existing CDSs to make some changes to its Service Management solutions and processes.
			• depends on manual rather than automated activity thereby reducing the reliability.

Options Explained for Key Processes

7.20.   The sections shows the different options for key processes:

Access Management

7.21.   Access to the Switching Portal and CSS SMS would need to be carried out by the new CSS CDS.

7.22.   Access to the existing CDS systems of UK Link, DES, ECOES, DSP and MPRS cannot be undertaken as part of CSS and still needs to be undertaken by the CDS responsible for each system.

7.23.   **Option 1** – this would add Access Management to the CSS CDS, but would leave access to all other systems to the incumbent CDS. This provides the least cost and most beneficial solution.

7.24.   **Option 2** – this would route all access requests through the Switching Service Desk, who would then direct the request to the appropriate CDS for completion.

7.25.   This would potentially delay completion of access requests as it would add an additional party (Switching Service Desk) into the chain of activity.

7.26.   It would provide Switching participants with a single point of contact, but would be unable to support users requesting access to CDS systems for non-switching purposes.

7.27.   **Option 3** – would select the 'independent activity' route for this service with the same result as option 1.

Incident Management

7.28.   **Option 1** would result in all CDSs managing their own Incidents with a result that participants would have to decide where to raise as Incident, with the result that if they choose incorrectly, the issue would not get resolved until the correct CDS was selected.

7.29.   No overall Incident metrics would be produced and severities in each CDS may have different meanings.

7.30.   **Option 1** would not deliver the Programme objectives.

Option 2 would store all Incidents in a single system (CSMS) and all CDS would interact with this system and work Incident queues to resolve Incidents assigned to them.

7.31.   Expensive changes to CDS systems would be required to implement a single new Switching process and system. CDSs would then have their switching Incidents in one system and other Incidents in another,

7.32.   This would be expensive, take significant time, help the Switching service but cause the CDSs problems.

7.33.   **Option 3** would be to log all switching Incidents in the CSMS but to send these to each CDS as appropriate manually, via email, SharePoint or some other mechanism and receive responses in the same way.

7.34.   This would provide a single view of Incidents to participants and enable E2E metrics. It would require some manually effort on the part of Switching Service Desk, but would remove the need for costly, time-consuming changes to CDS systems.

Demand Management

7.35.   **Option 1** – The CDSs would understand, anticipate and influence customer demand for their own service(s) to ensure that their service had the capacity to meet the anticipated demand. This option would allow the individual CDS to manage demand but

without coordination there could be vital information that would not be known and could have an effect on the availability of their services.

7.36.   Without demand management coordination of the e2e demand could cause issues if excessive demand is placed on the Switching service.

7.37.   **Option 2** – With full Service Management integration a Centralised Demand Management (CDM) function could be created to understand, anticipate and influence customer demand for each CDS.

7.38.   The CDM would feed information into an integrated Capacity Management function to ensure that each CDS had the required capacity to meet the anticipated demand for services and would be alerted to any unforeseen excessive demand.

7.39.   **Option 3** – Each CDS would be responsible for understanding, anticipating and influencing customer demand for their own service(s) but would report any excessive demand that would breach Switching service tolerances to the Switching Service Desk.

7.40.   Excessive demand would then be communicated to all CDSs to ensure continued service availability. Where demand cannot be met and where possible the Switching Demand Management will discuss the excessive demand with the CDS to see if the traffic can be managed to ensure the continued service availability.

Service Reporting

7.41.   **Option 1** – Each CDS would be required to produce reports on service performance measures and would provide them individually to the various authorities. Each authority would collate the information from each CDS and through analysis identify Switching service success and failures.

7.42.   **Option 2** – With full Service Management integration Centralised Service Reporting would have the ability to generate reports for all CDSs and provide a report that showed individual CDS performance reports and also the success and failures of the Switching E2E service.

7.43.   **Option 3** – On a yet to be determined schedule each CDS would be required to provide a summary report on specific agreed Service KPIs that would be analysed to form a report that detailed the individual CDS performance and enable the creation of the E2E Switching service trends against SLAs.

Preferred Option

7.44.   Having considered the options, the relevant advantages and disadvantages, the selected option is Option 3 – to analyse each Service Management process to determine the commonality that is really needed, and specify requirements to support this analysis.

7.45.   This will minimise the changes to existing systems and reduce the risk of delays to a customer's switch; whilst delivering the majority of the benefits of option 1, at the cost of some manual processing behind the scenes.

7.46.   The assessment of the changes required for Option 3 for each SM process can be found in section 9.

8. Detailed Service Management Processes

Service Management Process Interactions

8.1.   The following diagrams show an overview of the proposed links and interactions between various Service Management processes.
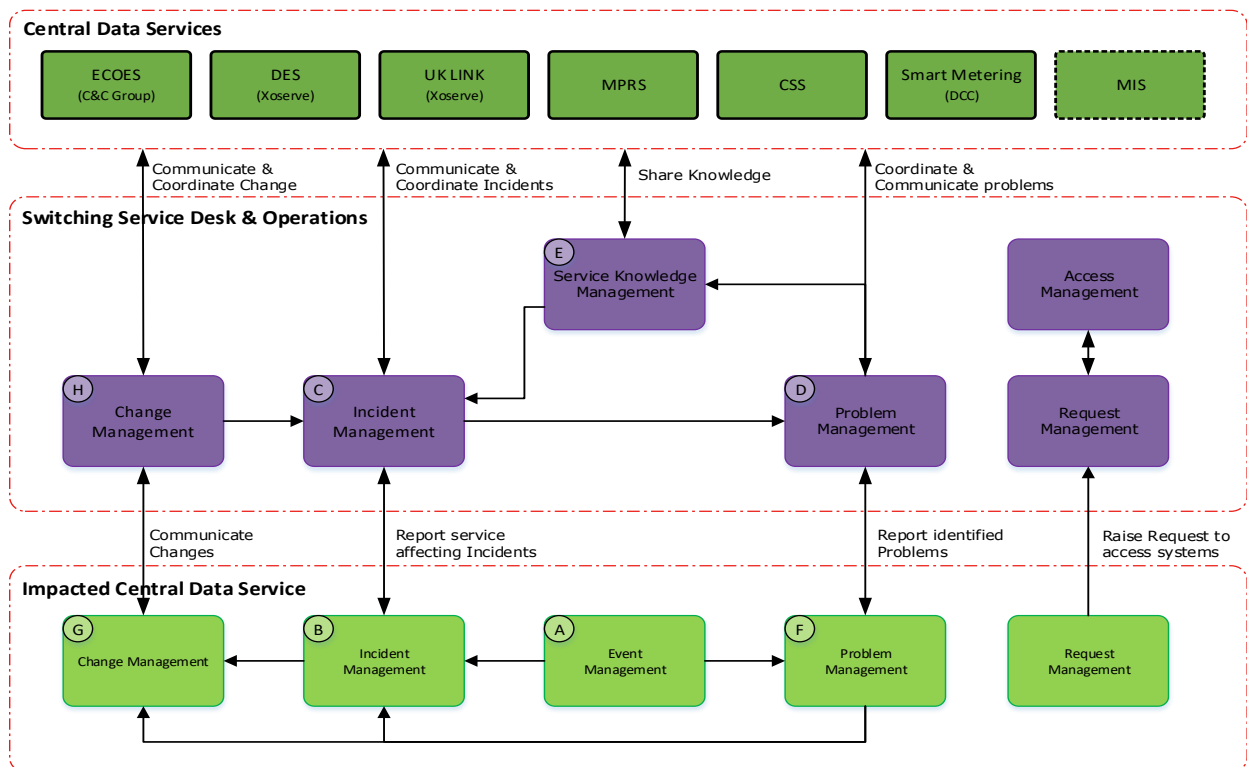
8.2.   This collective suite of processes manages the identification, investigation, notification and resolution of an incident or event – in this case a system failure. It also captures information about the incident and stores this as a knowledge article for use if this event reoccurs.

8.3.   Incidents that occur regularly will be linked together as a 'Problem' which look for the underlying cause of the failure and seek to provide a solution that will prevent the specific event from reoccurring

8.4.   Co-ordination of these SM processes is essential to ensure that events and incidents that occur are promptly and effectively address and preventative measures are taken to avoid reoccurrence. Failure to do this will not only affect Switching timings, but would not address the underlying causes.

8.5.   This is one of the key reasons that option 1 in the previous section is not suitable for Switching.

Incident, Problem and Knowledge

Figure 9 – Service Management Interactions – part 1

8.6.   Below is a scenario that shows how Service Management processes link together.

8.7.   An event (in this example, a system failure) is triggered through the Event Management process **(A)** and an Incident is created as a result via the Incident Management process **(B).**

8.8.   The Incident is triaged and it is determined that it is a Switching Service affecting Incident. The impacted Central Data Service informs the Switching Service Desk Incident Management **C** that their Switching Service has an issue that has an impact on the Switching Service. The severity of the incident may vary depending on the CDS that has the failure.

8.9.   The Switching Incident Management process **(C)** creates an Incident on the CSS Service Management System and notifies the Central Data Services of the impact.

8.10.   The CSS Service Management System highlights that this is a known problem and the Switching Problem Management **(D)** has a work around that has been added to the Service Knowledge Management system **(E)**.

8.11.   The Switching Service Desk is then able to notify the Impacted Central Data Service of the workaround to resolve the Incident to restore normal Service. The Central data Service will again be notified by the Service desk that normal service has resumed.

8.12.   The Impacted Central Data Service Problem Management **(F)** will investigate the Problem to identify the underlying cause of the problem. This would typically result in a Change to the system and a Change notification would be submitted to Change management team **(G)**.

8.13.   The submitted Change would be reviewed internally and then submitted to the Switching Change Management **(H)** for review and approval. Where applicable the Central Data Services would be notified of the change and would be consulted on the impact of the Change in order to approve the Change to the system. Once approved the Change is implemented and the problem record is resolved.

Demand, Capacity and Availability

8.14.   The following diagram show another overview of the links or interactions between another set of Operational Service Management processes.
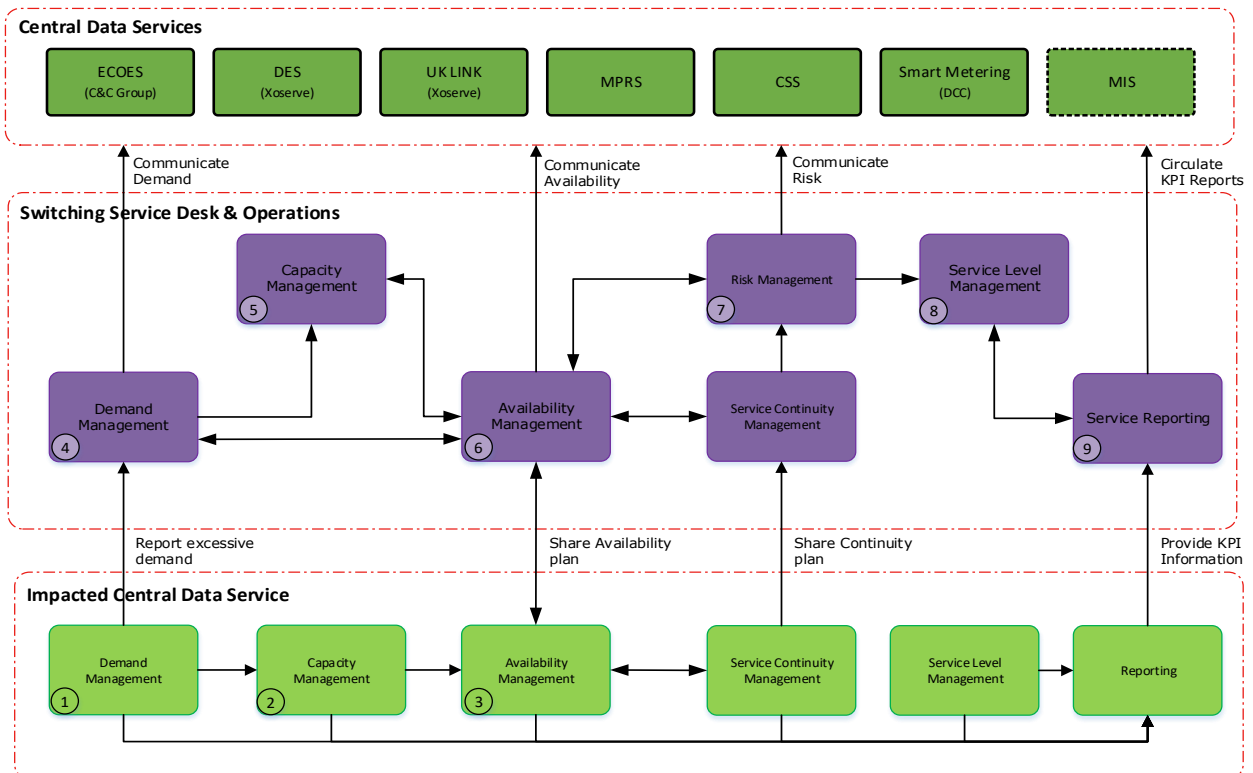
Note: The Process flow is triggered from the Impacted Central Data Service

Figure Error! Unknown switch argument. **- Service Management Interactions - part 2**

8.15.   This is another scenario that shows how further Service Management processes link together.

8.16.   The Impacted Central Data Service Demand Management **(1)** has identified that an excessive amount of data is to be transmitted through the network and alerts Capacity Management **(2)** to ensure that this is within Service limits.

8.17.   Capacity Management **(2)** will ensure that the service is capable of dealing with the excessive demand and alert Availability Management **(3)** if this cannot be achieved.

8.18.   Demand Management **(1)** will notify the Switching Demand Management **(4)** to inform them of the excessive amount of traffic.

8.19.   The Switching Demand Management **(4)** will notify the Central Data Services to enable them to ensure normal service is available.

8.20.   Switching Demand Management **(4)** will notify Capacity Management **(5)** who will in turn inform Availability Management **(6)** if the demand cannot be met.

8.21.   If the Demand cannot be met, the Availability Management **(3)** where possible will discuss the excessive demand with the Impacted Central Data Service and see if the traffic can be managed to ensure continued service availability.

8.22.   Availability Management **(6)** will inform Risk Management about the Service Availability issue which is logged in the Risk Register as it could cause problems in the future.

8.23.   Without Demand Management, excessive demand could lead to missed SLAs which will be picked up through Service Level Management **(7)** and then reported on by Service Reporting **(9)**.

8.24.   Failures in Availability, Demand or Capacity Management would feed back into the Continual Service Improvement or Strategy Management in order to identify improvements to mitigate against future events.

9. Service Management Impacts

9.1.   This section identifies the impacts of Switching Service Management on the Central Data Services, Switching Operations and Switching Service Desk. It shows the high level requirements and has colour coded the anticipated level of change on the existing CDSs.

Service Strategy

9.2.   Service strategy defines the perspective, position, plans and patterns that a service provider needs to execute to deliver an organisation's business outcomes. 'Switching Operations' is the organisation that has the licence obligations to operate CSS, in the same way as DCC 'is the 'Operator' for SMETS. The Existing CDS Providers include the providers of UK Link, DES, ECOES, MPAS and DCC (DSP).

9.3.   The involvement and extent to which any CDS or CSS SP is involved in the strategy and process creation is likely to vary between the individual service providers, based on the functionality it provides to Switching.

Process Name	New CSS Service Provider (CSS SP)	Switching Service Desk (SSD)	Switching Operations (SO)	Existing Central Data Service (CDS) Providers
Strategy Management	• New process & procedures; • Understand Switching needs; • Identify improvement areas; • Attend Switching Service Management steering group; • Contribute to the Service Management Strategy improvements; • Implement service improvement initiatives.	• No Impact.	• New process & procedures; • Strategic assessment of Switching services; • Understand Switching needs; • Arrange steering groups for key stakeholders; • Identify improvements; • Amend Switching Service Management Strategy; • Define/plan strategic initiatives; • Ensure implementation of these initiatives.	• Assist with the creation of new process & procedures; • Attend Switching Service Management steering group; • Contribute to the Service Management Strategy improvements; • Implement service improvement initiatives.

D-4.1.9 Switching Arrangements Service Management Strategy

Process Name	New CSS Service Provider (CSS SP)	Switching Service Desk (SSD)	Switching Operations (SO)	Existing Central Data Service (CDS) Providers
Service Portfolio Management	• New process & procedures;	• No Impact.	• New process & procedures; • Define and analyse new or changed Services; • Approve implementation of new or changed Switching Services that do not require Governance changes; • Assess the Service Portfolio at regular intervals; • Keep the Service Portfolio up to date.	• Assist with the creation of new process & procedures; • Provide Service information to populate the Switching Service Portfolio;
Risk Management	• New process & procedures; • Communicate Switching service risk.	• No impact.	• New process & procedures; • Create Switching Service risk Register; • Capture Switching Service risk; • Determine risk mitigation measures; • Identify risk owner(s); • Evaluate/assess all Switching risks.	• Assist with the creation of new process & procedures; • Communicate Switching service risk.
Demand Management	• New process & procedures; • Communicate excessive demand for services.	• New process & procedures; • Record demand on Service Management System.	• New process & procedures; • Conduct trend analysis to understand and anticipate demand; • Notify CDS of excessive demand for services.	• Assist with the creation of new process & procedures; • Communicate excessive demand for services.
Financial Management	• New process & procedures.	• No Impact.	• New process & procedures; • Allocate costs to services; • Financial analysis & Reporting; • Service Invoicing.	• No impact.

Service Design

9.4.   Service design includes the design of the services, governing practices, processes and process required to realise the service provider's strategy and to facilitate the introduction of services into supported environments.

Process Name	CSS Service Provider (CSSSP)	Switching Service Desk (SSD)	Switching Operations (SO)	Existing Central Data Services (CDS)
Service Catalogue Management	• New process & procedures; • Communicate CSS Service information.	• No impact.	• New process & procedures; • Create Switching Service Catalogue; • Keep Switching Service Catalogue up to date; • Publish Switching Service information.	• Assist with the creation of new process & procedures; • Provide Switching Service information for Service Catalogue.
Service Level Management	• New process & procedures; • Commit to CSS SLA agreements; • Service Level Monitoring & SLA KPI Reporting.	• No impact.	• New process & procedures; • Identify CSS Service Level Requirements; • Create CSS SLA agreements; • Create Operational Level Agreements (OLAs) • Switching Service Level Monitoring and Reporting.	• Assist with the creation of new process & procedures; • Provide Switching Service SLA KPI reports.
CSS Service Provider Management (Service Management under ITIL)	• New process & procedures; • Agree CSS service provider contract; • Produce service level performance summary reports.	• No impact.	• New process & procedures; • Evaluate prospective CSS suppliers; • Negotiate binding contract with CSS provider(s); • CSS Supplier and Contract Reviews; • Produce service level performance reports; • CSS Contract Renewal or Termination.	• No impact.

Process Name	CSS Service Provider (CSSSP)	Switching Service Desk (SSD)	Switching Operations (SO)	Existing Central Data Services (CDS)
Availability Management	• New process & procedures; • Agree CSS availability levels; • Conduct availability Testing; • CSS Availability Monitoring and Reporting; • Provide CSS Service Availability information and plans.	• No impact.	• New process & procedures; • Create availability levels; • Availability Testing; • Availability Monitoring and Reporting; • Coordinate and Maintain Switching Service Availability information and plans.	• Assist with the creation of new process & procedures; • Provide Service Availability information and plans.
Capacity Management	• New process & procedures; • Manage, control and predict the performance, utilisation and capacity of IT resources; • Produce reports on service and resource utilisation and performance.	• No impact.	• New process & procedures; • Translate business needs into capacity & performance requirements; • Ensure that performances and capacities of services meet their agreed targets; • Publish reports on service and resource utilisation and performance.	• Ensure that adequate Capacity management process procedures are in place; • Manage, control and predict the performance, utilisation and capacity of IT resources; • Produce reports on service and resource utilisation and performance.
Informational Security Management	• New process & procedures; • Evaluate the effectiveness of its own Information Security Management process; • Implement changes where required to ensure adequate security is in place. • Report security vulnerability when identified. • Assist with any non-compliance security issues.	• New process & procedures; • Communicate security vulnerabilities when identified; • Record vulnerabilities on SMS. • Communicate all reported service affecting incidents to the required CDS.	• New process & procedures; • Make sure all security mechanisms are subject to regular testing; • Management of Security Incidents; • Initiate vulnerability impact assessment; • Security vulnerability reviews; • Produce Security Management Reports.	• Assist with the creation of new process & procedures; • Evaluate the effectiveness of its own Information Security Management process; • Implement changes where required to ensure adequate security is in place. • Report security vulnerability when identified. • Assist with any non-compliance security issues.

Process Name	CSS Service Provider (CSSSP)	Switching Service Desk (SSD)	Switching Operations (SO)	Existing Central Data Services (CDS)
Service Continuity Management	• New process & procedures; • Disaster recovery testing; • Communicate disaster recovery procedures; • Provide Service Continuity/disaster recovery procedures; • Service Continuity Management reports.	• No impact.	• New process & procedures; • Design Services for Continuity; • Publish Service Continuity Management reports.	• Assist with the creation of new process & procedures; • Disaster recovery testing; • Provide Service Continuity/disaster recovery procedures; • Service Continuity Management reports.

Service Transition

9.5.   Service transition ensures that new, modified or retired services (during live operation) meet the expectations of the business as documented in the service strategy and service design stages of the lifecycle.

9.6.   During initial implementation of Switching, most of these activities will be carried out by the Delivery work-stream.

Process Name	CSS Service Provider (CSSSP)	Switching Service Desk (SSD)	Switching Operations (SO)	Existing Central Data Services (CDS)
Transition Planning and Support (*to be covered by delivery work stream)	• New process & procedures; • Create own transition plans; • Provide a summary of all planned or ongoing Service Transition projects.	• No Impact.	• New process & procedures; • Define stakeholders, responsibilities & resources; • Document risks, constraints & assumptions; • Coordinate activities and resources across projects; • Monitor project progress; • Publish a summary of all planned or ongoing Service Transition projects.	• Assist with the creation of new process & procedures; • Create own transition plans; • Provide a summary of all planned or ongoing Service Transition projects.

Process Name	CSS Service Provider (CSSSP)	Switching Service Desk (SSD)	Switching Operations (SO)	Existing Central Data Services (CDS)
Evaluation Management	• New process & procedures; • Assess all Major Changes prior to planning, build & deployments phases; • Communicate any concerns relating to a major Change.	• No Impact.	• New process & procedures; • Assess all Major Changes prior to planning, build & deployments phases; • Evaluate Major Changes after implementations; • Publish any concerns relating to a major Change.	• Assist with the creation of new process & procedures; • Assess all Major Changes prior to planning, build & deployments phases; • Communicate any concerns relating to a Major Change.
Operational Change Management	• New process & procedures; • Submit non-standard Change & Emergency Change Notifications; • Attend & provide input to Change Co-ordination Group; • Submit forward schedule of change to agreed timescales.	• New process & procedures; • Record Change Notifications on the SMS; • Escalate to Change coordinator;	• Arrange Change Co-ordination Group meetings; • Manage Change Notifications; • Ensure that issues are progressed satisfactorily; • Publish forward schedule of change; • Generate Change Notification reports.	• Assist with the creation of new process & procedures; • Submit non-standard Change & Emergency Change notifications; • Attend & provide input to Change Co-ordination Group; • Providing suitably empowered representation; • Submit forward schedule of change to agreed timescales.
Service Validation and Testing	• New process & procedures; • Ensure testing components meet quality criteria; • Test all Components, tools and mechanisms required for deployment; • Verify if all conditions are met for the new service to be activated.	• No Impact.	• New process & procedures; • Specify how the Release will be tested & quality-assured; • Test assure all components meet quality criteria; • Test assure all Components, tools and mechanisms required for deployment; • Verify if all conditions are met for the new service to be activated.	• Ensure that adequate Service Validation and Testing process procedures are in place; • Assist with the creation of new process & procedures;

D-4.1.9 Switching Arrangements Service Management Strategy

Process Name	CSS Service Provider (CSSSP)	Switching Service Desk (SSD)	Switching Operations (SO)	Existing Central Data Services (CDS)
Release and Deployment Management	• New process & procedures; • Conduct end-users and operating staff training; • Generate information/ documentation on newly deployed Release; • Provide initial live operation support.	• No Impact.	• New process & procedures; • Define the scope and content of Releases • Develops schedule for build, test and deployment of the release; • Circulate information/ documentation on newly deployed Release; • Support initial live operation.	• No Impact.
Asset and Configuration Management	• New process & procedures; • Create an Configuration Management System (CMS) database; • Populate database with CI descriptions and interrelationships; • Authorise changes to CMS; • Perform regular checks, ensuring the CMS information is accurate.	• No Impact.	• New process & procedures; • Create an Configuration Management System (CMS) database; • Populate database with CI descriptions and interrelationships; • Authorise changes to CMS; • Perform regular checks, ensuring the CMS information is accurate.	• No Impact.
Knowledge Management	• Assist with the creation of new process & procedures; • Provide known issues and workarounds to populate the Service Knowledge Management repository.	• New process and procedures; • Access database to help with Incident & request Management; • Feedback any irregularities found with knowledge articles;	• Develop Knowledge Management System; • Establish and maintain KM I/Fs & transfer mechanisms; • Make the Knowledge Management information available and accessible to all interested parties; • Capture, store, analyse & share data effectively across lifecycle processes and Service Providers.	• Assist with the creation of new process & procedures; • Provide known issues and workarounds to populate the Service Knowledge Management repository.

Service Operation

9.7.   Service operation coordinates and carries out the activities and processes required to deliver and manage services at agreed levels to business users and customers. Service operation also manages the technology that is used to deliver and support services.

Process Name	CSS Service Provider (CSSSP)	Switching Service Desk (SSD)	Switching Operations (SO)	Central Data Services (CDS)
Event Management	• New process & procedures; • Create mechanisms for generating meaningful system Events; • Accurate Event filtering to interpret the meaning of an Event; • Communicate Warning and Exception events; • Report Events that endangers service availability.	• New process & procedures; • Create Incidents for Events that endangers service availability.	• New process & procedures; • Create mechanisms for receiving meaningful system Events; • Event review to identify trends; • Ensure closer of events are handled appropriately.	• Ensure that adequate Event Management process procedures are in place; • Assist with the creation of new process & procedures.
Request Management	• New process & procedures; • Escalation point for Requests.	• New process & procedures • Record all Requests on SMS; • Process approved Requests; • Escalate Requests to appropriate Provider;	• New process & procedures; • Escalation point for Requests.	• No impact
Access Management	• New process & procedures.	• New process & procedures; • Record Service Requests for access to new systems on the Service Management System;	• New process & procedures; • Authorise access to systems.	• No Impact

Process Name	CSS Service Provider (CSSSP)	Switching Service Desk (SSD)	Switching Operations (SO)	Central Data Services (CDS)
Incident Management	• New process & procedures; • Report service affecting Incidents; • Provide 2nd/3rd line support; • Undertake tasks or provide information to resolve Incidents.	• New process & procedures; • Record all Incidents on SMS; • Resolve known Incidents; • Escalate Incidents to appropriate resolver group; • Communicate service affecting Incidents.	• New process & procedures; • Escalation point for Incidents; • Manage Major Incidents; • Monitor Incident SLAs.	• Assist with the creation of new process & procedures; • Report service affecting Incidents; • Undertake tasks or provide information to resolve Incidents.
Problem Management	• Assist with the creation of new process & procedures; • Report known Problems; • Undertake tasks or provide information to resolve Problems.	• New process & procedures; • Record all Problems on SMS; • Implement known workarounds; • Communicate service affecting problems.	• New process & procedures; • Coordinate Problem Management activities which span multiple Service Providers; • Generate Problem Management reports.	• Assist with the creation of new process & procedures; • Report known Problems; • Undertake tasks or provide information to resolve Problems.

Continuous Service Improvement Processes

9.8.   Continual service improvement ensures that services are aligned with changing business needs by identifying and implementing improvements to IT services that support business processes. The performance of the IT service provider is continually measured and improvements are made to processes, IT services and IT infrastructure in order to increase efficiency, effectiveness and cost effectiveness.

Process Name	CSS Service Provider (CSSSP)	Switching Service Desk (SSD)	Switching Operations (SO)	Central Data Services (CDS)
Service Measurement	• New process & procedures; • Measure service performance; • Review Service Management services on a regular basis; • Generate performance reports.	• No Impact.	• New process & procedures; • Set Key Performance Indicators (KPIs) • Hold benchmarking, audits, maturity assessments & reviews; • Measure the performance of the Switching service; • Review Service Management services on a regular basis; • Generate performance reports.	• No impact
Service Reporting	• New process & procedures; • Generate reports on the effectiveness of Service management processes; • Provide Key Performance Indicator (KPI) summary reports.	• No Impact.	• New process & procedures; • Compile reports on the effectiveness of Service Management processes; • Publish reports to stakeholders;	• Assist with the creation of new process & procedures; • Provide Key Performance Indicator (KPI) summary reports.
Continual Service Improvement	• New process & procedures; • Identify more economical ways of providing services where possible; • Provide service quality improvement recommendations.	• No Impact.	• New process & procedures; • Maintain CSI register; • Review Key Performance Indicator (KPI) reports; • Recommend service quality improvements; • Identify more economical ways of providing services where possible.	• Assist with the creation of new process & procedures; • Provide service quality improvement recommendations.

10. Regulation Approach

Current Switching Regulation

10.1. The current code governance framework for Switching is fragmented, with many processes and central systems operating differently for the electricity and gas markets. Under the current code governance framework, switching arrangements and related central systems are primarily governed by:

- the MRA for electricity;
- the SPAA and the Uniform Network Code (UNC) for gas.

10.2. There are also some supporting elements of the switching process that are contained in other codes such as the Balancing and Settlement Code (BSC) and the Distribution Connection Use of System Agreement (DCUSA).

10.3. The Ofgem Target Operating Model (TOM) for moving to a faster, more reliable and cost effective-switching process initially proposed that the new Switching Arrangements be incorporated into the Smart Energy Code (SEC).

10.4. During the Blueprint phase, however, further options were explored for the new governance framework for Switching and used the principles of better regulation to assess where to locate the new regulatory obligations for Switching.

A new Retail Energy Code (REC)

10.5. Ofgem has now suggested that creating a dual fuel REC would be the best option for delivering new governance arrangements that meet not only the requirements of the programme but also the better regulation principles. It has consulted industry on this position (see page 59 of the: Ofgem Consultation).

What needs to be regulated for Service Management?

10.6. The Service Management obligations on Market Participants and Service Providers need to be reflected in the governance arrangements, to ensure that each organisation operates effectively and in agreed timescales.

Proposed Obligations

10.7. The high level Service Management obligations should be set out in the appropriate regulatory instrument. It is proposed that these could include (but not be limited to):

- prior notification of planned outages to services;
- co-ordination of Switching down time for all CDS providers;
- communication of service affecting and other significant incidents;
- methods of accessing CSS for requesting services;
- forecasting of service demand;
- performance and availability expectations;
- performance measurement reporting requirements.

10.8. The details for many of these will be defined during the production of the detailed Service Management Requirements.

Potential Subsidiary Documents

10.9. There are a lot of obligations that require details to be included in regulatory instruments. These could be specified in Code Subsidiary documents, detailed policy documents or documents that determine how the CDSs would engage with the Service Management Service. The following are proposed approaches, including:

- Incident Management policies including the definition of the severities and the target response and resolution times for example

Severity	Description	Target Response Time	Target Resolution Time
1	A Category 1 Incident (Major Incident) which prevents a large group of Market Participants from using Live Services.	10 mins	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.	20 mins	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.	45 mins	72 hours
4	An Incident which has a minor or minimal adverse impact on the activities of an Incident participant.	1 day	10 days

- Detailed obligations and processes for connection to, and use of the CSS Portal;
- Connection rules for accessing and using the Switching communications Network;
- Detailed Performance Measures e.g.

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

CSS Service Provider Contracts

10.10. Whilst REC will contain the overall Service Management obligations, the detailed requirements should also be defined in the contracts for all new service providers. Existing CDSs will also need to sign up to the REC either as a party to the REC, or by a CDS specific REC undertaking. Alternatively compliance to the REC could be added into SEC and other Industry Codes, but this would be the least preferred option. This will determined by the Regulatory team once the CSS SM requirements have been defined.

10.11. These should include:

- reflect the requirements of the REC;
- response and resolution times for incidents and service requests;
- incident and service request reporting;
- definition of the processes and arrangements for impact assessment of any proposed Switching changes;
- service availability requirements and performance measurements that apply;
- change co-ordination and notification requirements.

11. Service Management Components

11.1. There are a number of components to the Switching Service Management. Many of these are essential at some level e.g.

- a Service Management System to log and manage incidents;
- a Service Desk to carry out administrative activities and provide a contact point for users; and
- an Operations function to oversee the delivery of the service(s).

11.2. This section expands on this and puts these components in the context of Switching.

New CSS Providers

11.3. As part of the procurement for new CSS Service providers, the requirements for Service Management will be built into the core functionality that each new provider will be expected to deliver.

11.4. Each CSS service provider will be expected to develop its own processes to deliver and support Service Management and this will be built into the contracts awarded.

11.5. There are a number of different services that will procured as part of CSS, including communications, address data, a Service Desk and the CSS Central Data Service provider (CSS CDS) that will process and manage the switching requests and will own the CSS Database.

11.6. For Service Management, the new CSS CDS is expected to be contracted to:

- develop and implement the required switching services and Service Management processes;
- host the Switching Database and supporting services;
- provide second and third line application support to resolve defects, Incidents and Problems and fulfil Service Requests.

11.7. This service provider will carry out much of the Switching Service Management processing for the new Switching Services. However, the information and activities that it undertakes will need to be managed and co-ordinated alongside those of all other CDSs.

11.8. To do this, there will be a Switching operations layer that provides this co-ordination and provides a single source of information relating to Switching.

Operations Layer

11.9. There will be a Switching Operations team that will operate under Switching Licence conditions introduced by Ofgem.

11.10. The primary role of Switching Operations will be to manage the delivery of CSS Services effectively, to support faster and more reliable switching for energy consumers. The team will manage the new CSS Service Providers and co-ordinate information and from both these and the existing CDSs.

11.11. It will support the overall Service Management capability by undertaking key ITIL roles and processes. The team will be involved in all stages of the ITIL lifecycle responsible for and leading the Service Strategy, Service Design, Service Transition and Continuous Service Improvement stages.

11.12. The team will also be involved in key processes in the Service Operations Stage; leading Major Incidents and Problem Management and supporting Incident investigation during Initial Live Operation.

11.13. Further information about the Operations Layer will be covered in the 'Switching Operations Strategy'.

Existing CDS Providers

11.14. Each existing CDS will be expected to change systems or processes to meet the agreed end to end Service Management requirements

11.15. As per section 0, the changes to existing systems and processes will be kept to a practical level, to avoid expensive or nugatory rework.

11.16. However, where previous batch processes become real time interactions, then the supporting Service Management processes and SLAs will inevitably need to change.

Service Desk

11.17. There will be a new Switching Service Desk that provides a single first line point of contact to Market Participants for switching services. This Service Desk will log and manage all Incidents and Service Requests through to resolution and will communicate with the service desks of all CDSs.

11.18. This Service Desk will be procured by either the Switching Operations team or the new CSS Central Data Service.

11.19. It will also interact with the CES Contact Centre (should the new CES be procured) where there are Incidents relating to access to data held by Switching or its Service Providers.

11.20. Figure 11 below highlights the expected support models for CSS and CES and shows how the groups will interact with each other in order to resolve Incidents or issues.
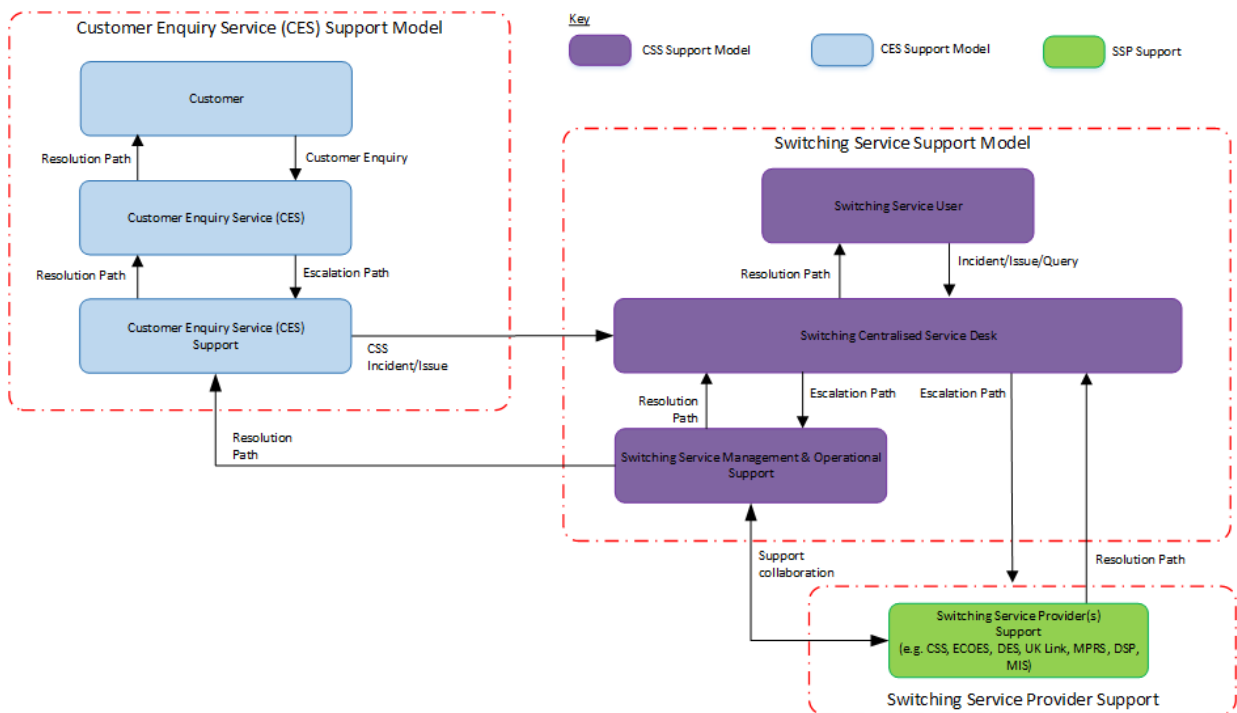

Figure 11 – Switching Support Model

11.21. The Switching Service Desk will provide support to the Market Participants using the CSS Service Management System (CSMS) to action, route and provide guidance on all incoming contacts.

11.22. The 1st line service desk will work with CDS Service Providers to resolve Incidents. All Service Providers will maintain 2nd line Service Desk capabilities and relevant resolver groups as needed to maintain Switching Services.

11.23. The CSS Service Desk will deliver the following core capabilities:

- service user access authentication to CSS;
- a level of triage using an appropriate level of automated/scripted diagnostic tooling that enables the resolution of a high proportion of Incidents without recourse to 2nd line Service Desks;
- Incident resolution using Service Provider diagnostic tools;
- Incident resolution using knowledge based tools/scripting that is provided by the Service Provider;
- Request Management to handle generic requests raised by the CSS Users;
- Access Management to provide Portal user creation and password resets;
- access to Service Provider service status information to enable effective end-to-end communications;
- 1st Line Service Desk workforce management including recruitment, training, scheduling and performance management;
- creation and maintenance of knowledge base articles obtained from SPs.

11.24. It is expected that the CSS 1st line Service Desk will be available to the CSS Service Users 24 hours per day, 365(6) days of the year.

11.25. Access to the Service Desk will be, in order of preference, via a Self Service Portal, email and telephone.

Service Management System

11.26. The CSS Service Management System (CSMS) will be a system based tool to support Switching Service Management. Its key purpose is to:

- manage Incidents, Problems and Service Requests;
- provide knowledge; and
- co-ordinate Switching service changes.

11.27. There are a number of Service Management systems available (e.g. Remedy) that can be bought and configured to match the CSS requirements.

11.28. The requirements for this will be produced in the 'Service Management Portal and System Requirements' product that will be produced and included in the procurement documents.

11.29. It is likely that this will be provided by the new CSS CDS as it will need to integrate this into its process.

SM Portal

11.30. Switching Users will need to:

- request services to support their use of Switching e.g. installation or configuration of communications into CSS;
- raise Incidents;
- receive notification of Switching bulletins of availability and the forward schedule of change.

11.31. It is expected that this will be provided by a secure online portal.

11.32. This may be a web-based approach, or a custom built user front-end.

11.33. The requirements of this will be captured in the 'Service Management Portal and System Requirements' and the portal procured.

CSS Knowledge Management

11.34. The CSS Knowledge Management function will gather, validate, analyse, store, maintain and share knowledge and information within the Service Management System. It will provide a clear, 'user friendly', easy to search, comprehensive suite of current and relevant documentation that encourages the different user groups to be efficient and self-sufficient.

11.35. Knowledge articles will be created manually with input from Switching Market Participants and CDSs, and will be stored in the CSMS or within a document management solution, depending on the content and purpose of the knowledge.

CSS Security

11.36. Information is a critical business asset, and that protecting its information assets is a key reputational and operational priority.

11.37. The CSS Information Security team will co-ordinate the information security governance and operational activities across CSS Service Management. The team will be responsible for developing, implementing and managing Information Security measures throughout the CSS and ensuring that its service providers are in compliance with its legal and regulatory framework set out in the industry codes.

11.38. The key functions of the team are to operate, maintain and develop the CSS Information Security Management System (ISMS), protectively monitor and respond to threats, provide security awareness briefings and conduct assurance over its Service Providers. Each of the Service Providers will maintain their own ISMS. An information security forum will be created with each of the Chief Information Security Officers from the CSS Service Providers.

11.39. The security requirements are detailed in 4.1.10.2 E2E Security Requirements.

CSS Business Continuity

11.40. The continuation of service in the event of a serious business impacting event will be a critical aspect of the provision of the CSS infrastructure and as a result, the provision of Business Continuity and Disaster Recovery (BCDR) capability will be a key requirement for CSS Service Management and all CDSs.

11.41. A BCDR event will always be a "Major Incident" so that the full capability of Service Management and CDSs can be invoked to resolve the event. A BCDR event will also invoke the Switching Operations Crisis Management Team to manage external stakeholder communications and mitigate overall business impact.

11.42. Not all Major Incidents will invoke the BCDR procedures.

Customer Enquiry Service

11.43. As part of Switching, a new Customer Enquiry Service (CES) will be established. This will provide Consumers with:

- the name of the Supplier that is responsible for their gas and electricity supplies;
- the MPAN or MPRN for their meter points.

11.44. Whilst this CES will use data from Switching so that it has the best information available to provide a good service to the end customers, it will not be integrated into the CSS, but will have its own contact centre to manage consumers' requests.

11.45. However, on occasions the CES service provider may have issues with accessing the CSS information. In these circumstances, the CES contact centre may raise an incident with the CSS Service Desk which will then manage its resolution.

12. Impact on Organisations

Service Providers

Existing CDS providers

12.1. Existing CDS providers will be required to assess the Service Management requirements that will be defined in the 'CSS Service Management Requirements' and determine how they will meet these requirements. A high-level via of the activities required by process is shown in section 8.

New CSS Providers

12.2. The appointed new CSS CDS will be required to develop its own processes and deliver automated solutions to meet the Service Management requirements.

Energy Suppliers

12.3. Gaining and losing suppliers are responsible for their component parts of the E2E Switching Arrangements and the management of their services, their technology and tooling to support Switching. The gaining supplier will have a responsibility to report any exceptionally high demand that it may place on the Switching services.

12.4. Any demand that is deemed excessive must be reported to the Switching Service Desk which will in turn communicate the demand to the Key Switching Service Providers. This will enable Service Providers to ensure their services are able to meet such a demand or provide a suitable solution to mitigate the risk to the Switching Service(s). Details can be found in the subsequent document 'CSS Service Management Requirements'.

12.5. The gaining and losing suppliers will also be notified when the Switching service is degraded or suffers an outage. They will have access to a Switching Portal to enable the creation of Incidents, log requests for services and to access the Knowledge base. The Portal will also provide a Switching Service status that will show the availability of services and highlight any issues that may have an impact on Switching.

12.6. The following shows the responsibilities of the E2E Service Management and on the gaining and losing supplier:

CSS Responsibilities	Supplier Responsibilities
Define, make available, maintain and communicate the Demand Management Policies and Procedures.	Assist in the development of the Demand Management Policies and Procedures
Provide support and guidance to Service Providers in fulfilling their Demand Management roles and responsibilities.	Identify, understand and anticipate demand that could have an impact to the E2E Switching services.
Communicate non-BAU demand for services to CDS Providers	Report Non-BAU demand that could have an impact on the E2E Switching services to the Service Desk.
Provide solutions where required to suppliers in order to mitigate demand.	Make all reasonable attempts to comply with requests made by the E2E Service Desk to undertake tasks to mitigate demand where necessary.

CSS Responsibilities	Supplier Responsibilities
Communicate all reported Switching service affecting incidents to Suppliers.	Notify Service Desk if it has system problems/outages that affect its ability to complete its Switching obligations

Other Interested Parties

12.7. Subject to entitlement to access, all Market Participants will have access to a single source of information for Switching via the Switching Portal and via the Switching Service Desk.

12.8. The Switching security requirements will limit parties to the information that they are permitted to access in their REC role.

Appendices

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Appendix 1 – Glossary

Acronym / Term	Definition
BAU	Business As Usual
BCDR	Business Continuity and Disaster Recovery
BSC	Balancing and Settlement Code
BSCCo	Balancing and Settlement Code Company
CAB	Change Assurance Board
CDS	Central Data Services
CES	Customer Enquiry Service
CR	Change Request
CSI	Continuous Service Improvement
CSMS	CSS Service Management System
CSS	Centralised Switching Service
DCC	Data Communications Company
DES	Data Enquiry Service, operated by Xoserve
DSMS	DCC Service Management System
DSP	Data Services Provider
E2E	End-to-End
ECOES	Electricity Central Online Enquiry Service
ITIL	Information Technology Infrastructure Library
MRA	Master Registration Agreement
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
SLM	Service Level Management
SM	Service Management
SOC	Strategic Outline Case
SPAA	Supply Point Administration Agreement
SPOF	Single Point of Failure
SSP	Self Service Portal

Acronym / Term	Definition
Switching Operations	The organisation or team that operates the Switching Services in the way that DCC does for SMETS.
TOM	Target Operating Model
TPIs	Third Party Intermediaries
UK Link	Provider of systems that support the competitive gas market, operated by Xoserve.

13. Appendix 2 –Service Process Definitions

This appendix contains Service Management processes definitions by ITIL stage.

Service Strategy

13.1. Service strategy defines the perspective, position, plans and patterns that a service provider needs to execute to meet an organisation's business outcomes.

Strategy Management

13.2. The process responsible for defining and maintaining an organisation's perspective, position, plans and patterns with regard to its services and the management of those services. The strategy management team is also responsible for ensuring that it achieves its intended business outcomes.

Service Portfolio Management

13.3. The process responsible for managing the service portfolio. Service portfolio management ensures that the service provider has the right mix of services to meet required business outcomes at an appropriate level of investment. Service portfolio management considers services in terms of the business value that they provide.

13.4. **Service Portfolio -** The complete set of services that is managed by a service provider. The service portfolio is used to manage the entire lifecycle of all services, and includes three categories: service pipeline (proposed or in development), service catalogue (live or available for deployment), and retired services.

Risk Management

13.5. The process responsible for identifying, assessing and controlling risks. Risk management is also sometimes used to refer to the second part of the overall process after risks have been identified and assessed, as in 'risk assessment and management'.

13.6. **Risk Assessment -** The initial steps of risk management: analysing the value of assets to the business, identifying threats to those assets, and evaluating how vulnerable each asset is to those threats. Risk assessment can be quantitative (based on numerical data) or qualitative.

Demand Management

13.7. The process responsible for understanding, anticipating and influencing customer demand for services. Demand management works with capacity management to ensure that the service provider has sufficient capacity to meet the required demand.

13.8. At a strategic level, demand management can involve analysis of patterns of business activity and user profiles, while at a tactical level, it can involve the use of differential charging to encourage customers to use IT services at less busy times, or require short-term activities to respond to unexpected demand or the failure of a configuration item.

Financial Management

13.9. A generic term used to describe the function and processes responsible for managing an organisation's budgeting, accounting and charging requirements. Enterprise financial management is the specific term used to describe the function and processes from the perspective of the overall organisation.

13.10. Financial management for IT services is the specific term used to describe the function and processes from the perspective of the IT service provider.

Service Design

13.11. A stage in the lifecycle of a service. Service design includes the design of the services, governing practices, processes and policies required to realise the service provider's strategy and to facilitate the introduction of services into supported environments

Service Catalogue Management

13.12. The process responsible for providing and maintaining the service catalogue and for ensuring that it is available to those who are authorised to access it.

13.13. **Service Catalogue -** A database or structured document with information about all live IT services, including those available for deployment. The service catalogue is part of the service portfolio and contains information about two types of IT service: customer-facing services that are visible to the business; and supporting services required by the service provider to deliver customer-facing services.

Service Level Management

13.14. The process responsible for negotiating achievable service level agreements and ensuring that these are met. It is responsible for ensuring that all IT service management processes, operational level agreements and underpinning contracts are appropriate for the agreed service level targets. Service level management monitors and reports on service levels, holds regular service reviews with customers, and identifies required improvements.

Supplier Management

13.15. The process responsible for obtaining value for money from suppliers, ensuring that all contracts and agreements with suppliers support the needs of the business, and that all suppliers meet their contractual commitments. See also supplier and contract management information system.

Availability Management

13.16. The process responsible for ensuring that IT services meet the current and future availability needs of the business in a cost-effective and timely manner. Availability management defines, analyses, plans, and measures and improves all aspects of the availability of IT services, and ensures that all IT infrastructures, processes, tools, roles etc. are appropriate for the agreed service level targets for availability.

Capacity Management

13.17. The process responsible for ensuring that the capacity of IT services and the IT infrastructure is able to meet agreed capacity - and performance-related requirements in a cost-effective and timely manner. Capacity management considers all resources required to deliver an IT service, and is concerned with meeting both the current and future capacity and performance needs of the business.

Information Security Management

13.18. The process responsible for ensuring that the confidentiality, integrity and availability of an organisation's assets, information, data and IT services match the agreed needs of the business. Information security management supports

business security and has a wider scope than that of the IT service provider, and includes handling of paper, building access, phone calls etc. for the entire organisation.

Service Continuity Management

13.19. The process responsible for managing risks that could seriously affect IT services. IT service continuity management ensures that the IT service provider can always provide minimum agreed service levels, by reducing the risk to an acceptable level and planning for the recovery of IT services.

Service Transition

13.20. A stage in the lifecycle of a service. Service transition ensures that new, modified or retired services meet the expectations of the business as documented in the service strategy and service design stages of the lifecycle.

Transition Planning and Support

13.21. The process responsible for planning all service transition processes and coordinating the resources that they require.

Evaluation Management

13.22. The process responsible for formal assessment of a new or changed IT service to ensure that risks have been managed and to help determine whether to authorise the change.

Operational Change Management

13.23. The process responsible for controlling the lifecycle of all changes, enabling beneficial changes to be made with minimum disruption to IT services.

13.24. **Change -** The addition, modification or removal of anything that could have an effect on IT services. The scope should include changes to all architectures, processes, tools, metrics and documentation, as well as changes to IT services and other configuration items.

13.25. **Change Advisory Board (CAB) -** A group of people that support the assessment, prioritisation, authorisation and scheduling of changes. A change advisory board is usually made up of representatives from: all areas within the IT service provider; the business; and third parties such as suppliers.

Service Validation and testing Management

13.26. The process responsible for validation and testing of a new or changed IT service. Service validation and testing ensures that the IT service matches its design specification and will meet the needs of the business.

Release and Deployment Management

13.27. The process responsible for planning, scheduling and controlling the build, test and deployment of releases, and for delivering new functionality required by the business while protecting the integrity of existing services.

13.28. **Release** - One or more changes to an IT service that are built, tested and deployed together. A single release may include changes to hardware, software, documentation, processes and other components.

Asset and Configuration Management

13.29. The process responsible for ensuring that the assets required to deliver services are properly controlled, and that accurate and reliable information about those assets, is available when and where it is needed. This information includes

details of how the assets have been configured and the relationships between assets.

13.30. **Asset -** Any resource or capability. The assets of a service provider include anything that could contribute to the delivery of a service. Assets can be one of the following types: management, organisation, process, knowledge, people, information, applications, infrastructure or financial capital.

13.31. **Configuration -** A generic term used to describe a group of configuration items that work together to deliver an IT service, or a recognisable part of an IT service. Configuration is also used to describe the parameter settings for one or more configuration items.

Service Knowledge Management

13.32. The process responsible for sharing perspectives, ideas, experience and information, and for ensuring that these are available in the right place and at the right time. The knowledge management process enables informed decisions, and improves efficiency by reducing the need to rediscover knowledge.

13.33. **Service Knowledge Management System -** A set of tools and databases that is used to manage knowledge, information and data. The service knowledge management system includes the configuration management system, as well as other databases and information systems. The service knowledge management system includes tools for collecting, storing, managing, updating, analysing and presenting all the knowledge, information and data that an IT service provider will need to manage the full lifecycle of IT services.

Service Operation

13.34. A stage in the lifecycle of a service. Service operation coordinates and carries out the activities and processes required to deliver and manage services at agreed levels to business users and customers. Service operation also manages the technology that is used to deliver and support services.

Event Management

13.35. The process responsible for managing events throughout their lifecycle. Event management is one of the main activities of IT operations.

13.36. **Event -** A change of state that has significance for the management of an IT service or other configuration item. The term is also used to mean an alert or notification created by any IT service, configuration item or monitoring tool. Events typically require IT operations personnel to take actions, and often lead to incidents being logged.

Request Management

13.37. The process responsible for managing the lifecycle of all service requests. Request Management defines specific agreed steps that will be followed for a service request of this category. Request may be very simple, with no requirement for authorisation (e.g. password reset), or may be more complex with many steps that require authorisation (e.g. provision of an existing IT service).

13.38. **Service Request -** A formal request from a user for something to be provided – for example, a request for information or advice; to reset a password; or to install a workstation for a new user. Service requests are managed by the request fulfilment process, usually in conjunction with the service desk. Service requests may be linked to a request for change as part of fulfilling the request.

Access Management

13.39. The process responsible for allowing users to make use of IT services, data or other assets. Access management helps to protect the confidentiality, integrity and availability of assets by ensuring that only authorised users are able to access or modify them. Access management implements the policies of information security management and is sometimes referred to as rights management or identity management.

Incident Management

13.40. The process responsible for managing the lifecycle of all incidents. Incident management ensures that normal service operation is restored as quickly as possible and the business impact is minimised.

13.41. **Incident -** An unplanned interruption to an IT service or reduction in the quality of an IT service. Failure of a configuration item that has not yet affected service is also an incident – for example, failure of one disk from a mirror set.

Problem Management

13.42. The process responsible for managing the lifecycle of all problems. Problem management proactively prevents incidents from happening and minimises the impact of incidents that cannot be prevented.

13.43. **Problem -** A cause of one or more incidents. The cause is not usually known at the time a problem record is created, and the problem management process is responsible for further investigation.

Continuous Service Improvement Processes

13.44. Continual service improvement ensures that services are aligned with changing business needs by identifying and implementing improvements to IT services that support business processes. The performance of the IT service provider is continually measured and improvements are made to processes, IT services and IT infrastructure in order to increase efficiency, effectiveness and cost effectiveness.

Service Measurement

13.45. The process responsible for the creation of Key Performance Indicators (KPI) to ensure the efficiency, effectiveness and cost effectiveness of services are managed.

13.46. **Key Performance Indicators (KPI)** - A metric that is used to help manage an IT service, process, plan, project or other activity. Key performance indicators are used to measure the achievement of critical success factors. Many metrics may be measured, but only the most important of these are defined as key performance indicators and used to actively manage and report on the process, IT service or activity. They should be selected to ensure that efficiency, effectiveness and cost effectiveness are all managed.

Continual Service improvement

13.47. The process responsible for defining and managing the steps needed to identify, define, gather, process, analyse, present and implement improvements. The performance of the IT service provider is continually measured by this process and improvements are made to processes, IT services and IT infrastructure in order to increase efficiency, effectiveness and cost effectiveness. Opportunities for improvement are recorded and managed in the CSI register.

13.48. **CSI Register -** A database or structured document used to record and manage improvement opportunities throughout their lifecycle.

Service Reporting

The process responsible for the activities that produce and deliver reports of achievement and trends against service levels. The format, content and frequency of reports should be agreed with customers.