ELEXON

# Interim Issue Consultation

## Issue 101: Consultation on the framework for the enduring governance, funding and operation of the Data Integration Platform

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## About This Document

The purpose of this consultation is to invite potential DIP users and other interested parties to provide their views on the proposed framework for the enduring governance, funding and operation of the Data Integration Platform (DIP). The framework and supporting Business Requirements, which have been developed by Elexon in collaboration with the Issue 101 Issue Group, will form the initial basis for the DIP legal text.

Wider industry feedback is being sought at this early stage, prior to the legal text drafting, due to the scale and significance of the work being undertaken. The consultation responses will then be considered during preparation of the legal text. There will be a further consultation on the enduring governance, funding and operation of the DIP, which will include the draft legal text and subsidiary documents. The Issue 101 progression plan can be found in Section 5 of this document.

It should be noted that the DIP is currently being built and, while the framework and Business Requirements presented here represent the current views of the enduring governance and operation arrangements, these are subject to change as the DIP is developed.

This Interim Consultation for Issue 101 closes:

5pm on **Wednesday 12 July 2023**.

There are three parts to this document:

- This is the main document. It provides details on the background of the DIP and proposed framework for the DIP arrangements.
- Attachment A contains the draft Business Requirements.
- Attachment B contains the specific questions on which we seek your views. Please use this form to provide your response to these questions, and to record any further views or comments you wish to be considered.




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# 1. Summary

## Background

Market-wide Half Hourly Settlement (MHHS) will result in an increase in the volume of data being sent and received across the retail electricity industry. In order to facilitate MHHS, an improved architecture for industry data transfer will be required. Ofgem agreed with the Architecture Working Group's (AWG) recommendation[1] that an Event Driven Architecture (EDA) platform – the Data Integration Platform (DIP) – should be used instead of updating existing communication platforms. In April 2022, Ofgem decided that Elexon should govern the DIP through the Balancing and Settlement Code (BSC), and should develop and consult upon the changes required. Issue 101 was raised to gather industry input into Elexon's proposal, steered by Ofgem's April 2022 decision document[2], for the operation, funding and governance of the DIP following implementation.

## Proposed Framework

The proposed framework for the DIP arrangements has been developed in collaboration with the Issue 101 Issue Group. It has been guided by the principles and minded to positions detailed in the Ofgem decision document. Guiding principles were to base the arrangements on the Code Manager approach suggested by the Code Review, consider industry best practice, and to allow the arrangements to be portable, should the DIP Manager role be reassigned. The proposed arrangements are summarised below:

- Governance – The DIP Manager will make all decisions about DIP other than where the decision sits with the DIP Change and Advisory Board (DCAB).
- DCAB – The DCAB will act as a specialist user group to advise the DIP Manager. Additionally, they will be asked to determine whether to implement changes with material impact and changes to the DIP 'Level One' legal text, as well as hearing any appeals against the DIP Manager's determinations.
- DIP Documents – DIP legal text (Level One) detailing the high level obligations for DIP Users will be a Supplement to the BSC and will not be subject to the existing BSC Change processes. There will be at least eight DIP Subsidiary Documents (DSDs) (Level Two), covering procedures and detailed arrangements. Changes to several existing BSC Sections will also be required to facilitate the DIP arrangements.
- DIP Service Provider – Changes to the DIP will be made by the DIP Service Provider, but only following direction from the DIP Manager.
- On/Off-boarding – On-boarding and Off-boarding processes will be administered by the DIP Manager, including communication with Code Bodies (BSCCo and RECCo) where appropriate.
- Assurance – The DIP Manager will carry out risk-based assurance of DIP Users. The DIP Service Provider and the DIP Manager will also be subject to assurance checks.
- Change management – The DIP Manager will determine whether changes should be raised, change progression routes, timetables, and whether changes should be implemented (other than where the decision sits with the DCAB). Appeals of DCAB decisions will be made to Ofgem. Changes to DIP Message Formats will be through the Energy Market Architecture Repository (EMAR) change process, based on Code ownership.

**Not sure where to start?**

We suggest reading the following sections:

- Have 5 minutes? Read section 1
- Have 15 minutes? Read sections 1 and 3
- Have 30 minutes? Read all sections
- Have longer? Read all sections and attachments

[1] https://www.elexon.co.uk/article/architecture-working-group-makes-recommendation-on-reference-architecture-to-support-mhhs/
[2] https://www.ofgem.gov.uk/publications/decision-governance-funding-and-operation-event-driven-architecture-market-wide-half-hourly-settlement


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- Funding – Core activities (related to Settlement) will be funded by Suppliers only, based on their share of MPANs. A Standing Charge will recover a fixed amount each year. Non-core services (not related to Settlement), will be paid for by the beneficiaries at the DIP Manager's discretion. This can include one-off on-boarding, change or data release costs.
- Data Management – All DIP Users, including the DIP Manager and DIP Service Provider will be subject to the Data Protection Act (DPA), GDPR and Ofgem's Data best practice. The DIP Manager will check provisions are in place as part of on-boarding and assurance activity, but will not be responsible for confirming adherence.
- Data Sharing – The DIP Manager will have an open data model that shall be the minimum requirements for DIP Users' own open data.


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## 2. Background

Market-wide Half Hourly Settlement[3] (MHHS) will make use of additional meter readings available from smart and advanced meters, resulting in a significant increase in the volume and frequency of data feeding into Settlement.

As part of the earlier work under the Electricity Settlement Reform Significant Code Review[4] (SCR), the Architecture Working Group[5] (AWG) was established to develop, consult on and recommend solutions for the future system architecture design. The AWG recommended to Ofgem that 'event driven' reference architecture be developed to support MHHS implementation. In December 2021, Ofgem published its decision[6] supporting the AWG's recommendation. The decision requires industry to develop a hybrid architecture comprising the existing Data Transfer Service (DTS) and a new Event Driven Architecture (EDA) platform.

EDA is a software design pattern where components generate and react to events, where an event is something of business significance. The software publishes an event when something of business significance happens, such as registration information being updated or new meter data becoming available. Authorised interested parties are notified that the business event has occurred, and can retrieve the content. This software design allows a single event to be consumed by many parties, and is ideal for high-volume, real-time systems. EDA is already used in different economic sectors.

The EDA based system is being developed as a key component to support delivery of the MHHS Target Operating Model (TOM) and will be able to respond to the increase in volume and frequency of data more quickly than the current arrangements. The Data Integration Platform (DIP) is the delivery mechanism for the MHHS EDA.

In January 2022, Ofgem consulted on the ongoing governance, funding and operation of the EDA for MHHS[7], seeking views on whether Retail Energy Code Company (RECCo) or Balancing and Settlement Code Company (BSCCo) would be best placed to undertake this responsibility.

Ofgem published the Decision on the governance, funding and operation of an EDA for MHHS[8] on 21 April 2022, which determined that BSCCo should govern the EDA through the BSC. A modification to the BSC is required to give effect to this decision.

### How will the enduring DIP arrangements be implemented?

Ofgem intend to raise an Authority-led Significant Code Review (SCR) Modification that will formally implement changes for the ongoing governance, funding and operation of the DIP into the BSC. Before this change is raised, Ofgem has asked Elexon (in its role as an MHHS Participant) to develop the proposed solution in consultation with industry. This will build on the steer that Ofgem provided in their decision document and industry views that were shared as part of the Ofgem consultation responses.

**Data Transfer Service (DTS)**

The DTS, operated by ElectraLink, provides a managed file transfer service that allows Market Participants to share data via industry-created data flows. Currently, the DTS facilitates a wide range of business-critical processes including change of Supplier, metering, and Settlement.

[3] https://www.ofgem.gov.uk/publications/electricity-retail-market-wide-half-hourly-settlement-decision-and-full-business-case
[4] https://www.ofgem.gov.uk/publications/electricity-settlement-reform-significant-code-review-launch-statement-revised-timetable-and-request-applications-membership-target-operating-model-design-working-group
[5] https://www.elexon.co.uk/group/architecture-working-group-awg/
[6] https://www.ofgem.gov.uk/publications/decision-reference-architecture-market-wide-half-hourly-settlement-target-operating-model
[7] https://www.ofgem.gov.uk/publications/market-wide-half-hourly-settlement-mhhs-consultation-governance-funding-and-operation-event-driven-architecture
[8] https://www.ofgem.gov.uk/publications/decision-governance-funding-and-operation-event-driven-architecture-market-wide-half-hourly-settlement


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## Objectives of Issue 101

Issue 101 'Ongoing Governance, Funding and Operation of the Market-wide Half Hourly Settlement (MHHS) Data Integration Platform (DIP) by BSCCo'[9] is being used by Elexon to seek industry input to help develop the proposed enduring arrangements for the operation of the DIP. Issue 101's aim is to define the requirements and principles for the on-going DIP arrangements that can be used to develop the required changes for inclusion in the SCR Modification. Issue 101 will develop three key deliverables, which will be used by Ofgem as the key inputs into its SCR Modification:

1. Principles and assumptions for the enduring arrangements – the current proposal detailed in this document
2. Business Requirements – the current proposal is in Attachment A
3. Code drafting – the legal documents that will put the enduring DIP arrangements in place. These will be drafted following this consultation, working collaboratively with the Issue 101 Issue Group and Ofgem. They will then be consulted on (see Section 5 for details).

## What is the Data Integration Platform (DIP)?

The DIP is a vital technical component of the transition to MHHS that Market Participants will use to share Half-Hourly consumption information from consumers' smart meters. It will be a new middleware service to process messages to and from participants using event driven architecture. This new platform will deliver a cloud-native, server-less service that will provide the resilience, availability and scalability required to enable Programme Parties to move to Half-Hourly Settlement.

The DIP will not store the data being sent, but will be able to replay processes, for example to resend a message where information was missing. Consumption data sent via DIP will be stored in the Elexon Data Acquisition Hub (DAH), which is being developed outside of Issue 101 as part of Elexon's MHHS implementation project (separate from the MHHS Programme)..

The governance for the DIP will be included in a Supplement to the BSC. Although the Supplement will form part of the Code from a legal perspective, the DIP will be operationally separate from BSC, so utilising a Supplement to the BSC denotes this separation and allows for portability should the DIP Manager role be reassigned. The DIP not being part of the BSC operationally means the DIP will not be the responsibility of the BSC Panel, and will not subject to the BSC change process. Please note that a Licence change, which we are discussing with Ofgem, will be necessary in order to ensure that the DIP Supplement is not subject to the BSC Modification Procedures.

[9] https://www.elexon.co.uk/smg-issue/issue-101/


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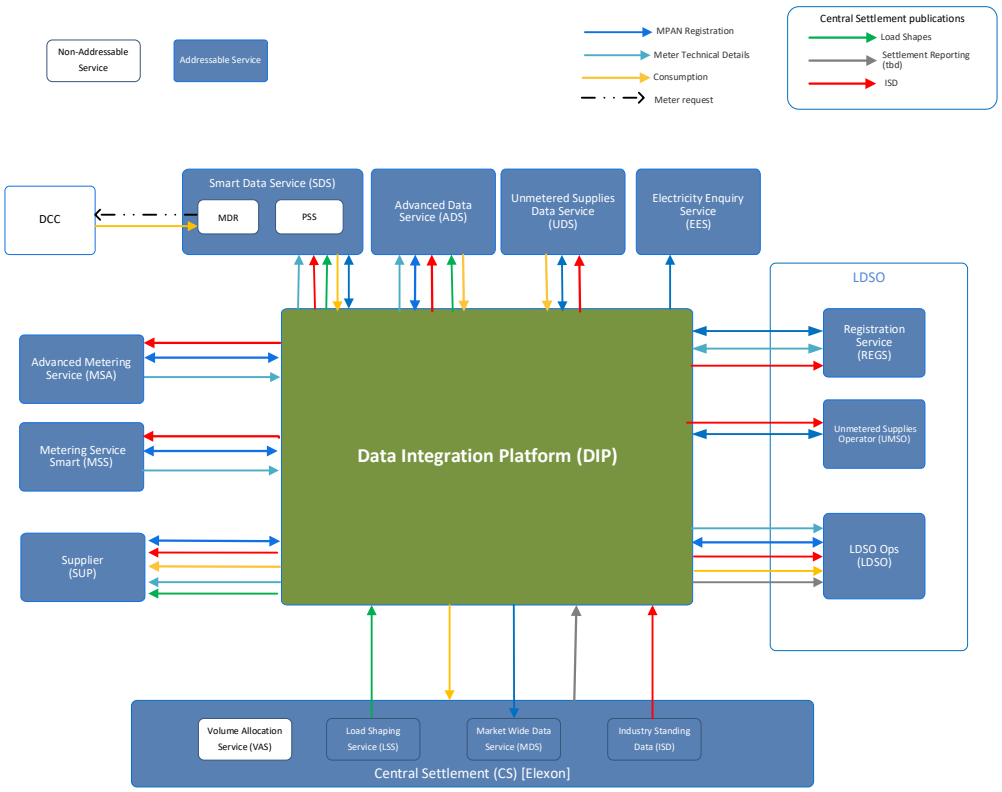


*Figure 1 - Diagram illustrating the interaction between DIP and wider industry*

## Key DIP Participants

Several important DIP participants are referenced throughout this document and the Business Requirements in Attachment A. These are defined below.

## DIP Manager

The DIP Manager is the organisation tasked with delivery of the DIP including its ongoing governance, funding and operation. Initially, Ofgem has appointed Elexon as the DIP Manager.

## DIP Service Provider

The DIP Service Provider role involves designing, building and testing the DIP, as well as supporting industry-wide End-to-End Industry Systems Integration Testing (SIT). The management and oversight of the DIP Service Provider sits with the MHHS Programme during the development stage.

Following implementation, the DIP Service Provider will be responsible for ensuring the DIP remains operational, addressing issues, making patches and updates, and implementing changes following DIP Manager direction. The DIP Manager will be responsible for overseeing the DIP Service Provider following MHHS implementation.


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## DIP Users

DIP Users are those who send and/or receive data over the DIP. There will be four distinct user-types:

- Market Participant Organisation (MPO)
- DIP Connection Provider (DCP)
- DIP Administrator
- Read Only Users.

MPOs will be able to nominate DCPs to act on their behalf, and will encompass different roles, as identified in the MHHS End-to-End Solution Architecture:

- Supplier
- Metering Services Smart (MSS)
- Metering Services Advanced (MSA)
- Smart Data Services (SDS)
- Advanced Data Service (ADS)
- Unmetered Supplies Data Service (UDS)
- Electricity Enquiry Service (EES)
- Registration Service (REGS)
- Unmetered Supplies Operator (UMSO)
- LDSO Ops (LDSO)
- Elexon Central Settlement Systems.

Read Only Users will include Code bodies that may have a need to see what is being sent via the DIP for assurance and/or compliance purposes.

Each DIP User may have multiple people who are able to access the DIP Portal, with different permissions for interacting with the DIP.

## Roles of Elexon relating to DIP

Elexon[10] has several different roles within the electricity industry. Some of these roles are not relevant to this report, but can be seen in Figure 2, such as the Electricity Market Reform Settlement (EMRS) and Capacity Market Advisory Group (CMAG) secretariat. Elexon's different roles in relation to the DIP are summarised below.

## MHHS Programme Manager

Ofgem appointed Elexon as the MHHS Programme Manager in their Electricity Retail MHHS Decision[11]. This role involves co-ordinating the development, testing, integration and transition activities to implement MHHS. The MHHS Programme is managing the development of the DIP, and the DIP Service Provider.

The MHHS Programme has been separated from Elexon's other BSC activities, meaning that the Programme has separate decision-making processes, reporting and resources. Colleagues within Elexon must adhere to strict separation agreements and rules.

[10] https://www.elexon.co.uk/about/about-elexon/
[11] https://www.ofgem.gov.uk/publications/electricity-retail-market-wide-half-hourly-settlement-decision-and-full-business-case


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## DIP Manager

Elexon, as the DIP Manager, will assume responsibility for the DIP from the Programme once a set of pre-approved criteria are met. The DIP Manager will then be responsible for the ongoing governance and operation of the DIP.

The DIP Manager shall include the Elexon Board (for oversight of the DIP Provisions), members of Elexon's Executive (responsibility for provision of resource and day-to-day leadership and direction) and Elexon staff employed in the delivery of the DIP. DIP Manager Provision for Elexon staff shall be seen as being separate to work carried out for the provision of the BSC, EMRS, or CMAG as applicable.

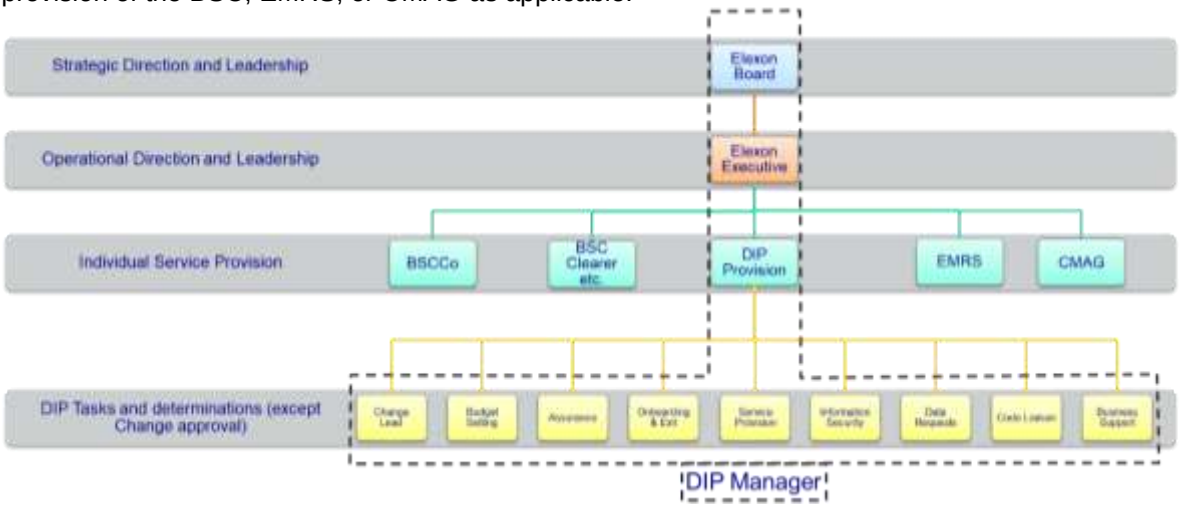


*Figure 2 - Diagram illustrating the makeup of the DIP Manager*

## The Balancing and Settlement Code Company (BSCCo)

BSCCo oversees the strategic operation and day-to-day management of the Balancing and Settlement Code (BSC). BSCCo will be a DIP User, as Central BSC Systems will utilise DIP data. BSCCo will also manage the DAH, which will store the data that is received from the DIP into the BSC Central Systems. At an operational level, there will be no interaction between DIP and BSCCo, other than where BSCCo is a DIP User.

BSCCo, as an MHHS Programme Participant, is treated the same as any other MHHS Programme Participant, and does not have any undue or unfair influence on the central programme, including DIP Design or the enduring DIP arrangements.



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## 3. Proposed Framework

Elexon and the Issue 101 Issue Group have considered various topics to generate the proposed framework for the DIP arrangements. The lifecycle of DIP operations have been considered, from how users will apply for access to the DIP, through to how that access may be revoked. For each topic, any relevant views presented in the Ofgem decision document were also considered, to ensure that the proposed arrangements are aligned with Ofgem's minded to position. A summary of Ofgem's requirements and how they have been met, with reference to specific Business Requirements, can be found in Section 4 of this report.

Further detail against each topic can be found in the draft Business Requirements document, found in Attachment A.

### Governance and Operations Management

Governance relates to the processes used to ensure the effective running of the DIP, and the interactions between the different bodies responsible for DIP.

| Governance and Operations Management | |
|---|---|
| Sub-topic | Proposal |
| Role of the DIP Manager | The DIP Manager will be responsible for the operation and management of the DIP, and will make all decisions about DIP other than where the decision sits with DCAB. |
| Transparency | The DIP Manager shall publish any determinations they make, including their reasons for that determination e.g. if they refuse to raise a change, they will need to explain why in their decision document. |
| Role of the DCAB | The DIP Change Advisory Board (DCAB) will be a standalone group with constituency membership. Members will be from across different DIP User types (see below). DCAB will act as a specialist advisory group and Critical Friend to the DIP Manager. They will only be called in to make decisions on specific changes (see Change Management).They will also hear appeals on DIP Manager decisions.<br>Figure 3 shows the different responsibilities of the DCAB. |


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| Governance and Operations Management | |
|---|---|
| DCAB Membership | DCAB Members shall consist of:<br>• 2 x Supplier Members<br>• 2 x Data Services Members<br>• 2 x LDSO Members<br>• 2 x Independent Industry Members<br>• Consumer Representative<br>• BSC Representative<br>• REC Representative<br>• DIP Manager Representative – non-voting<br>• NGESO Representative – non-voting<br>• Ofgem Representative – non-voting<br>Voting Members will serve terms of two-years, and no more than two consecutive terms. Term times will be staggered for the founding members, with one person of each group serving three years e.g. for their first terms one Supplier member will serve for two years, the other for three years. Both will then either serve a second two-year term, or be replaced by someone on a two-year term and so on and so forth in the standard two year cycle. |
| Basis for DCAB decisions | As written currently, DCAB members would act as an industry expert within their area. This would mean, for example, that the Supplier members would vote based on their expertise as a Supplier and with Supplier's interests at heart. Alternatively, DCAB members could be required to consult to ensure that they are representing the popular view of their role. This would mean, for example, that the Supplier members would need to consult with Suppliers before voting. |
| Communication with DIP Service Provider | DIP Users will have access to the DIP Service Provider via a service desk. Changes to the DIP will be made by the DIP Service Provider, but only following direction from the DIP Manager. |
| Service Management | The DIP Service Provider will provide Service Management functionality. |
| Role of current BSC Panel | The BSC Panel will have no role in the management of the DIP, as it is not a BSC Settlement System. They will be kept informed of any changes to the BSC. |
| Principles for incorporating DIP governance into the BSC | The standalone DIP legal text will be a Supplement to the BSC, and at least eight DIP Subsidiary Documents (DSDs) will be created.<br>Additionally, some BSC sections are expected to require amendments (see Legal Text section). |


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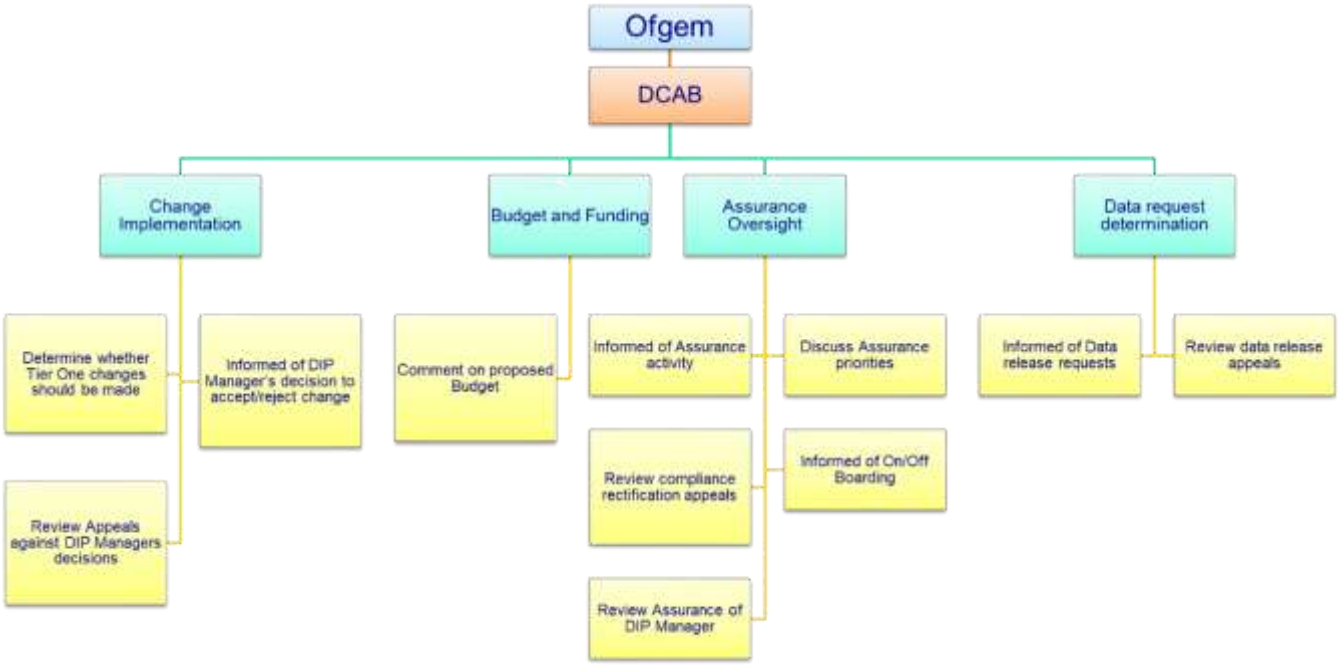


*Figure 3 - Diagram showing the role of the DCAB*

| Interim Issue Consultation Questions |
|---|
| **Do you agree with the proposed framework for governance, operations management, and service management?**<br>*Please provide your rationale with reference to the more detailed Business Requirements in Attachment A.* |
| **Do you agree with the proposed DIP Change Advisory Board (DCAB) membership?**<br>*Please provide your rationale.* |
| **Do you agree that the DCAB members should act as an expert in their role, rather than be required to consult their constituents?**<br>*Please provide your rationale.* |
| We invite you to give your views using the response form in Attachment B |


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## On-boarding and Off-boarding

On-boarding refers to the process whereby new DIP Users will be granted access to the DIP, and off-boarding refers to the process by which access to DIP will be revoked. This section is subject to ongoing discussions with Code Bodies.

| On-boarding | |
|---|---|
| Sub-topic | Proposal |
| On-boarding process | On-boarding process will be administered by the DIP Manager, including communication with Code Bodies where appropriate, as DIP access will be required for some Code Qualification.<br>On-boarding will be in two parts, conducted simultaneously:<br>• 'Functional' – meeting the technical requirements to be able to use the DIP<br>• 'Non-functional' – governance and processes around use of the DIP<br>Summary of DIP on-boarding process is as follows:<br>• Initial application<br>• DIP Manager reviews initial application<br>• Company Officer undergoes verification<br>• Nominate Senior Responsible Officer (SRO), Appointed Responsible Officer (ARO) and Technical Contact (TC), if required (defined below)<br>• Establish MPOs and/or DCP roles<br>• Security certificate exchange<br>• Unique Identification generated<br>• Message Formats assigned<br>• DIP Manager's non-functional checks<br>• DIP on-boarding complete (Code Bodies informed)<br>• Code Qualification complete (DIP Manager informed)<br>• Check on-boarding criteria remains extant<br>• Move to Production environment<br>• Update Security Certificates<br>• Industry Codes informed<br>A diagram showing the on-boarding process can be found below in Figure 4. |


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| On-boarding | |
|---|---|
| Points of entry to DIP on-boarding | There will be three points of entry into DIP:<br>• BSC Parties, following referral from BSC Market Entry process<br>• REC Parties, following referral from REC Market Entry Process<br>• DIP front page – primarily non Parties e.g. DCPs, but open to all |
| Non-BSC and/or non-REC Parties | For applicants that will not accede to the BSC and/or REC, a side-agreement must be agreed between the DIP Manager and the applicant, holding them to the DIP User requirements. |
| Details to provide for on-boarding | Details required for DIP on-boarding are:<br>• Nominating Officer's name and position – must be a company officer as per Companies House<br>• Company Name and Company number<br>• Need for DIP Access<br>• DIP Role<br>• BSCCo and/or RECCo qualification application details – date of application, progress, point of contact |
| DIP Manager's initial checks | The DIP will check, via API, whether the Company name, number, and Officer exist and tally. The DIP Manager will sense check applications, and will inform Code Bodies of direct entrants to check whether they are acceding to a Code. |
| Testing in non-Production environment | Message Formats will be assigned based on DIP Role, and the applicant will have to send one of each message permutation in the non-production environment. The applicant will then inform the DIP Manager that message sending complete, and the DIP Manager will check that messages were sent and there are no issues. Additional testing may be required to meet Code qualification requirements. |
| Non-functional checks | The DIP Manager shall ensure that DIP Users (including DIP Service Provider and DIP Manager) requiring a Data Privacy Impact Assessment (DPIA) have such in place as part of the on-boarding process. |
| Verification Services Provider | A Verification Services Provider will be used for verification and Certificate sharing as per the Code of Connection Agreement. |
| ISD Data | DIP will send DIP IDs to the Industry Standing Data (ISD) system. In the case of MPOs, DIP Role and DIP ID will marry with the equivalency within ISD. |


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| On-boarding | |
|---|---|
| Role of Code Bodies (if applicable) | Code Bodies will be involved in triggering DIP on-boarding through referral from the Code Body Market Entry Process, which can be manual or API – Code Bodies to determine.<br>Code Bodies will inform the DIP Manager of new entrants to the Code, and of when the entrant's Code Qualification is complete.<br>DIP will inform relevant Code Bodies when DIP on-boarding is complete, and when the DIP User has been moved to the production environment. |
| Roles within DIP User organisation | During on-boarding, the following may be nominated:<br>• Senior Responsible Officer (SRO) – The Nominating Officer will nominate an executive or senior individual who has the authority to make decisions for the organisation<br>• Appointed Responsible Officer (ARO) - The SRO may nominate AROs, who will have the key responsibilities of requesting Certificates on behalf of the applicant. Broader responsibilities, as defined by the SRO, are at the discretion of the applicant<br>• Technical Contact (TC) – TCs may be appointed that have the knowledge and capability to manage Certificates and the associated processes (initial Certificate signing requests, replacements, revocation requests etc.) on behalf of the Potential DIP User |
| DIP IDs within an organisation | MPOs will be able to have one or multiple DIP IDs, depending on how the organisation is set up. Generally, there will be one DIP IDs for each MPID-market role pair. An example can be seen in Figure 5. |
| Portability | The DIP on-boarding process will be 'stand-alone' from other industry Codes to allow for portability to a new DIP Manager. |

| Off-boarding | |
|---|---|
| Sub-topic | Proposal |
| Suspending DIP Users | The DIP Manager may Suspend DIP Users in an emergency, and will inform BSCCo, RECCo, Ofgem and other key parties retrospectively.<br>DIP Manager may suspend DIP Users if they are using the DIP contrary to the DIP Rules or fair use e.g. to send abusive messages. |
| Licence revocation or removal from Code | The DIP Manager shall be informed by Ofgem and/or Industry Code Panels of a decision to revoke a licence and/or remove a Market Participant from their Codes. |


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| Off-boarding | |
|---|---|
| Liaison with Code Bodies | Where an Industry Code intends to take action against a DIP User that is a Party to their Code, the DIP Manager shall be informed, and the DIP Manager shall determine whether they need to take action in regard to the same matter. A decision by a Code may not trigger an equal decision by DIP Manager. |
| Revocation of Certificates | Where a DIP ID is transferred to another entity, security certificates shall be revoked and re-issued as required. |
| Supplier of Last Resort (SOLR) | The DIP SOLR process is being defined in discussion with Code Bodies. Where a DIP User is required to exit the market, DIP Access shall not be revoked until:<br>• All actions to transfer responsibility from one Supplier to another (if applicable) under the BSC and/or REC have been completed<br>• The BSC and/or REC Panel has advised the DIP Manager to that effect<br>• DIP User mapping has been updated to reflect the change |
| Off-boarding process | Off-boarding will reverse the on-boarding process where applicable.<br>Where the DIP Manager determiners that a DIP User shall NOT retain DIP access as a third party:<br>• The DIP Manager shall inform user and commence the process to revoke DIP Access<br>• Date of DIP Access revocation determined by the DIP Manager (liaise with the BSCCo and/or RECCo if applicable)<br>• DIP Access revocation will not become effective until 5 Working Days following the DIP Manager's determination to allow for an appeal to the DCAB |
| Returning | Where a DIP User leaves the DIP, but wishes to return, their on-boarding requirements will determined by the DIP Manager based on their time away from the DIP, any changes to the User's systems and/or processes and any changes to the DIP. |

| Interim Issue Consultation Questions |
|---|
| **Do you agree with the proposed framework for on-boarding and off-boarding?**<br>*Please provide your rationale with reference to the more detailed Business Requirements in Attachment A.* |
| We invite you to give your views using the response form in Attachment B |


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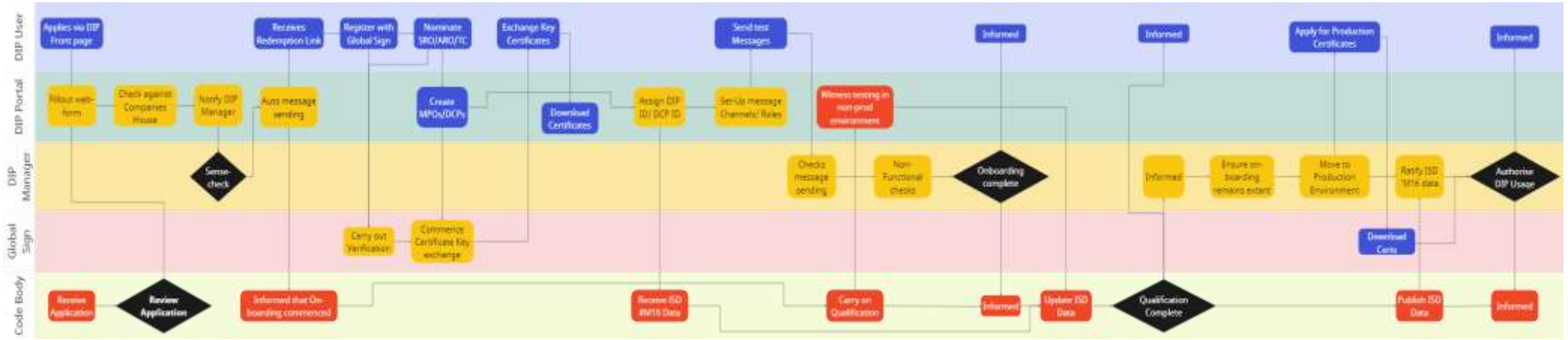


*Figure 4 - Swimlane diagram showing the on-boarding process*

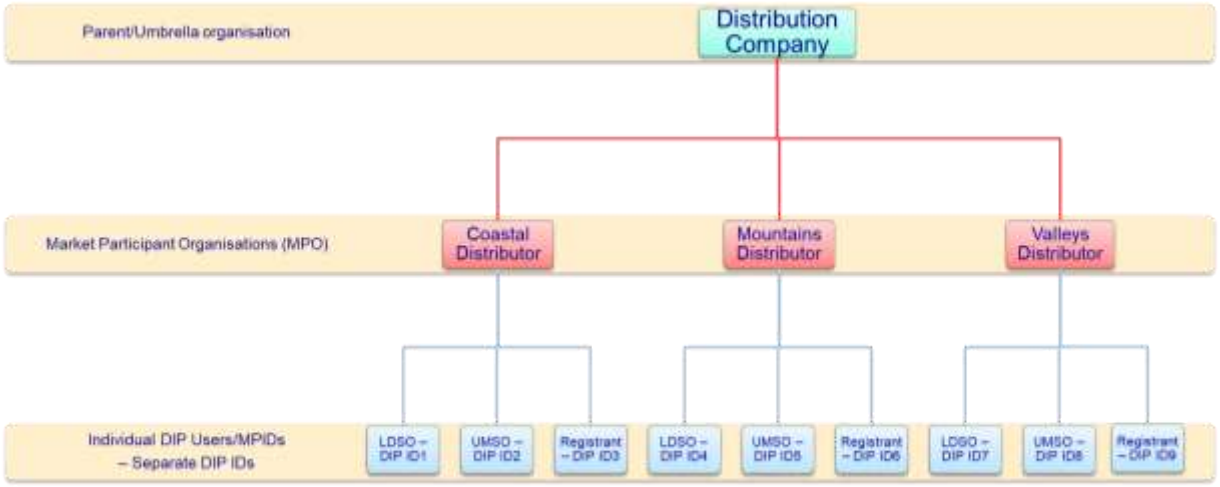


*Figure 5 - Diagram showing a hypothetical organisation with multiple DIP IDs*




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## Assurance and Reporting

Assurance relates to how the performance against the DIP requirements will be monitored and managed, including assurance of the DIP, the DIP Service Provider, the DIP Manager, and DIP Users. Reporting from the DIP may be utilised during assurance activities.

| Assurance and Reporting | |
|---|---|
| Sub-topic | Proposal |
| Performance assurance of the DIP | The DIP Manager will carry out assurance of the DIP Service Provider, DIP Users, and be subject to assurance checks themselves.<br>DIP Manager shall determine prioritisations for assurance activity each year. Assurance activity will be determined by intelligence and risk. As a minimum, the scope of audits each year shall include:<br>• Whether all requirements for on-boarding are still being met<br>• Whether Information Security requirements are being met<br>• Whether the DPIA (see Data Management) is still in place and suitable<br>• That the DIP User's cyber incident response plan is up to date and fit for purpose.<br>DIP Manager shall, if required, agree a rectification plan with the audit subject.<br>The DIP performance assurance process is shown in Figure 6. |
| Audit method | DIP audits may be either on-site or remote 'desktop' audits. Desktop audits may include use of data analysis, including use of AI or other appropriate methodology. |
| Independent audits | The DIP Manager may use a third party to carry out audits on their behalf. |
| DIP Service Provider assurance | The DIP Manager shall ensure the DIP Service Provider is meeting the Service Level Agreements (SLAs) agreed in the contract between Elexon and the DIP Service Provider. These include:<br>• Percentage of uptime – 99.95% (unplanned)<br>• Mean Time to Recovery – 60 minutes<br>Further SLAs will be shared in due course within the DSDs.<br>DIP Service Provider performance shall be published subject to contractual restraints.<br>DIP Manager shall ensure that the DIP Service Provider is carrying out maintenance and spot-checks as required by their contract and DIP Documentation e.g. DIP MPAN Address Maintenance Service spot-checks. |


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| Assurance and Reporting | |
|---|---|
| The DIP Manager's Audit | The DIP Manager shall be audited on their delivery of obligations at least once every two years.<br>The DIP Manager shall publish at least a summary of the findings of the DIP Manager's Audit and, if applicable, their rectification plan that shall be updated at least six-monthly until all findings have been rectified.<br>The DIP Manager's Audit may be carried out internally, or via an external auditor. |
| DIP Risk log | DIP Manager shall maintain a DIP Risk log, including mitigation plans, which shall be reviewed at least annually. DIP Assurance Risk log shall be published and updated following each review. |
| Reporting | The DIP will generate reports and share the reports with the DIP Manager, BSCCo, RECCo, and Other Code and Regulatory bodies if requested.<br>DIP Users will also be able to access reports via the DIP, and they will be published, subject to Mitigation, by the DIP Manager.<br>The DIP Manager shall use the reports for assurance, compliance and trend spotting. |

*Figure 6 - Diagram showing the cyclical DIP assurance process*

| Interim Issue Consultation Questions |
|---|
| **Do you agree with the proposed framework for assurance and reporting?**<br>*Please provide your rationale with reference to the more detailed Business Requirements in Attachment A.* |
| We invite you to give your views using the response form in Attachment B |


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## Change Management and Document Management

The DIP change management process will be used to introduce changes to the DIP arrangements in response to any concerns, problems or defects that may be identified. Under these processes, changes can be made to the DIP legal text, DIP Subsidiary Documents (DSDs) and to the DIP itself. Document management considers the process used to manage the DIP documentation, such as document registers and version control.

| Change Management and Document Management | |
|---|---|
| Sub-topic | Proposal |
| DIP Objectives | DIP changes will be assessed against the following Applicable Objectives:<br>• Provide accurate and timely support for the settlement process: Any change must enhance the precision and speed of Settlement processes. If the proposed change compromises accuracy or delays these processes, it may not be beneficial.<br>• Further consumers' interests through the appropriately controlled use of data: The change should prioritise data privacy and use it effectively to benefit consumers. If it potentially threatens data security or does not use data for consumer advantage, it could be problematic.<br>• Facilitate innovation in the energy sector and efficient delivery of services: The change should promote advancements in technology, processes, and services in the energy sector. If it inhibits innovation or disrupts the efficient delivery of services, it may not be prudent.<br>• Provide a reliable service that easily adjusts to the evolving needs of the market in the most cost effective way: The change should ensure the service reliability while also allowing flexibility to adapt to market trends and needs, and do so in a cost-effective manner. If it leads to higher costs without delivering significant benefits, it may not be worth implementing.<br>• Ensure the ongoing efficacy of central Balancing and Settlement systems: The change should maintain or enhance the performance of these core systems. If it has potential to destabilise them or reduce their efficiency, it would likely be detrimental. |
| Change management principles | The DIP Manager will make decisions about DIP change, other than where the decision sits with the DCAB. The change process will be open, with anyone able to propose a change and engage in consultations. |


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| Change Management and Document Management | |
|---|---|
| Change management process | In general, changes will follow a process of Raise, Assess, Consult, and Decide. The DIP Manager will determine the progression route and timetable for change. This includes whether a Workgroup would help in developing the solution, and whether there is merit in consulting. Solution development will be done predominantly by the DIP Manager. Detailed criteria to guide the DIP Manager in making these decisions will be developed during legal text drafting.<br>The DIP change management process in shown in Figure 7. |
| Raising changes | Anyone will be able to propose DIP changes. The DIP Manager will be able to determine whether proposed Changes are raised in accordance with published criteria and subject to an appeals process. |
| Tracking changes | Changes will be raised via the DIP Service Desk and will be tracked there too. Progression will be publically visible via the DIP Website |
| Approval of change | There will be two Tiers of DIP Change decision:<br>• Tier One – impacts DIP Design, DIP legal text, and/or has a 'material impact' on DIP and/or DIP Users (Elexon will develop what it believes to be 'material' during legal text drafting.)<br>• Tier Two – all other changes (e.g. a change to a DSD)<br>DCAB will approve Tier One changes. The DIP Manager will make recommendations on whether to implement changes and will be able to advocate for their recommendation as well as the proposer's position (if the Proposer is absent).<br>The DIP Manager will approve Tier Two changes.<br>Ofgem will be able to call in any change for decision. |
| Licence Change | Please note that a Licence change, which we are discussing with Ofgem, will be necessary in order to ensure that the DIP Supplement is not subject to the BSC Modification Procedures. |
| Implementation date | The DIP manager will determine when a change should be implemented to best suit the urgency, wider industry need and other industry uniform implementation dates. |
| Appeals process | Appeals on DIP Manager decisions, including decision on whether a change should be raised, can be made to the DCAB. Appeals on DCAB decisions can be made to the Authority. The DIP Manager will also have the right to appeal a DCAB decision. |


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| Change Management and Document Management | |
|---|---|
| Cross Code considerations | The DIP change process will incorporate the CACoP principles, which include cross-code coordination. However, the DIP Manager will not be a member of the CACoP forum. DIP changes will be considered at the Cross-Code Steering Group (CCSG). CCSG membership is still being considered. |
| DIP Message Format Changes | The DIP Message Formats will be recorded in the Energy Market Architecture Repository (EMAR), and will be changed through the standard EMAR change process, i.e. via the change process of the Message owner.<br>However, as the DIP Manager is aiming to operate in line with the Code Manger principle set by Ofgem, and effect change as quickly as possible, we think that Industry Codes should adopt a similar change process for DIP Message Format changes. Specifically, the Industry Code should have the authority to make decisions on these changes. This would mean that the overall end-to-end DIP change process need not be delayed while waiting for the next meeting of a decision making group. This could be enacted as part of the DIP SCR i.e. legal text changes to incorporate this would be incorporated in the wider DIP changes. For the BSC, this would mean Change Proposals would be raised to amend BSC owned DIP Message Formats and the decision on whether to implement such change would rest with the BSCCo and not the BSC Panel or their delegated committee.<br>The DIP Manager will need to be involved in the respective processes to instruct the DIP Service Provider to make amendments to reflect the EMAR changes. |
| Patching and upgrades | Where the DIP Service Provider has advised that they need to implement patches and/or critical updates, the DIP Manager will be able to approve this without need to adhere to the change process, but, in the interests of transparency, notice shall be published retrospectively. Any changes that will impact DIP Users will not be released without appropriate notification or impact assessment, as required. |


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| Change Management and Document Management | |
|---|---|
| DIP Documents | DIP Documents will be published on the DIP website and subject to version control. There will three types of DIP Document:<br>• Level One – Legal text that gives the DIP Manager authority to operate the DIP and lays out DIP Users' high level obligations and rights (this will be a Supplement to the BSC)<br>• Level Two – Subsidiary documents that provide detail on how systems and processes are expected to work and be delivered<br>• Level Three – Documents that are intended to provide assistance and information to DIP Users and other stakeholders |
| Document approval | Approval for implementing/changing documents will be (subject to Licence changes):<br>• Level One – DCAB; BSC Panel to be informed<br>• Level Two and Level Three documents – DIP Manager |
| Baseline Statement | DIP Manager shall maintain and publish a record of all live Level One, Level Two and Level Three documents subject to formal document control. The register of controlled documents shall identify:<br>• All controlled DIP Documents and their level<br>• The latest version of DIP Documents that are in force<br>• A record of all Changes that amended each DIP Document since first published<br>• A record of changes to DIP Documents that have been approved but not yet implemented<br>• Which role/team within the DIP Manager that is responsible for each document |


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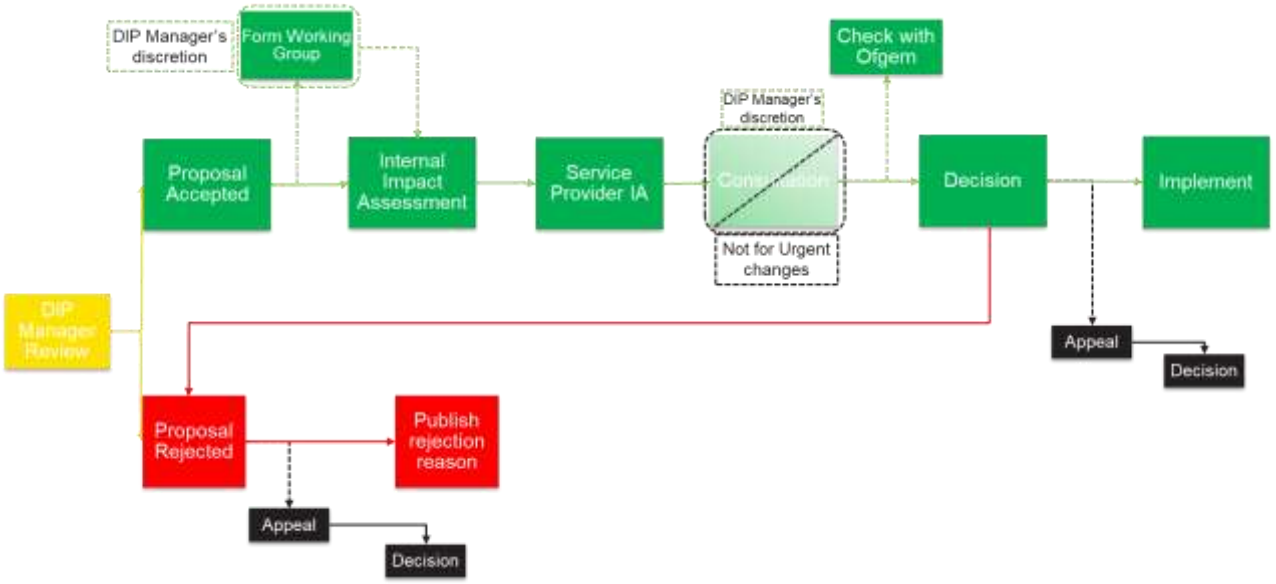


*Figure 7 - Diagram showing the DIP change process*

| Interim Issue Consultation Questions |
|---|
| **Do you agree with the proposed framework for change management and document management?**<br>*Please provide your rationale with reference to the more detailed Business Requirements in Attachment A.* |
| **Do you agree with the proposed DIP Applicable Objectives?**<br>*Please provide your rationale.* |
| **Do you have any comments on the criteria that should be used to determine if a change is material?**<br>*Please provide your rationale.* |
| **Do you agree that the relevant Code Body should make decisions on DIP Message Format changes?**<br>*Please provide your rationale.* |
| We invite you to give your views using the response form in Attachment B |


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## Funding and Budget

DIP will be a new service that will incur ongoing operational costs. As per Ofgem's direction, costs for the core DIP services will be borne by Suppliers.

| Funding and Budget | |
|---|---|
| Sub-topic | Proposal |
| Definition of 'core' services and activities | Core services and activities are those related to Settlement, e.g. sending Settlement data to Central Systems. Anything else shall be considered a 'non-core service'. |
| Funding for core activities | Core activities will be funded by Suppliers only. Funding will be based on Funding Share calculated with reference to MPAN share. This is because MPAN share is predicted to be the main indicator for DIP usage, while being simpler to calculate than using volume of data. A Standing Charge will recover a fixed amount each year, but this can be set to £0. The Standing Charge was requested by the Issue Group to provide more certainty to Suppliers for budgeting. |
| Charging for non-core activities | Costs associated with non-core services could be done on a 'user pays' arrangement, and shall be reviewed at least annually by the DIP Manager. Any one-off on-boarding, change or data release costs will be reflective of costs incurred by the DIP Manager and will be determined by the DIP Manager and agreed by the payer. |
| Cost recovery process | DIP costs will be recovered using BSC's existing cost recovery mechanism so far as reasonable and practicable. This is to achieve efficiencies for both Elexon and BSC Parties, but this mechanism will also allow Elexon to invoice non-BSC Parties. Overall, it will be cheaper than creating and operating DIP specific financial systems.<br>DIP Costs will not be counted towards BSC Funding Share calculations |
| Invoicing | The amount to be invoiced each month shall be the Standing Charge plus the monthly DIP costs per Supplier. |
| Arrangements for Party default | There will be no credit arrangements for DIP Users, as the mutualised amounts involved will be relatively small, particularly when compared to risk, meaning that calculating and managing arrangements would be disproportionately expensive for Suppliers and the DIP Manager. |


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| Funding and Budget | |
|---|---|
| Not-for-profit operating considerations | Cost recovery shall be transparent and follow the 'zero-profit' model used under the BSC (Section D). The Funding Share System includes the Final reconciliation at the end of the year, where costs are reconciled based on actual data. |
| Budget setting process and approval mechanism | The Budget shall relate to the DIP Manager's operational costs, the DIP Service Providers provision costs and continuous change. The DIP Manager will set the budget subject to consultation – this may form part of Elexon's Business plan consultation, or be independent at the DIP Manager's discretion.<br>The DIP budget setting and funding process is shown in Figure 8. |

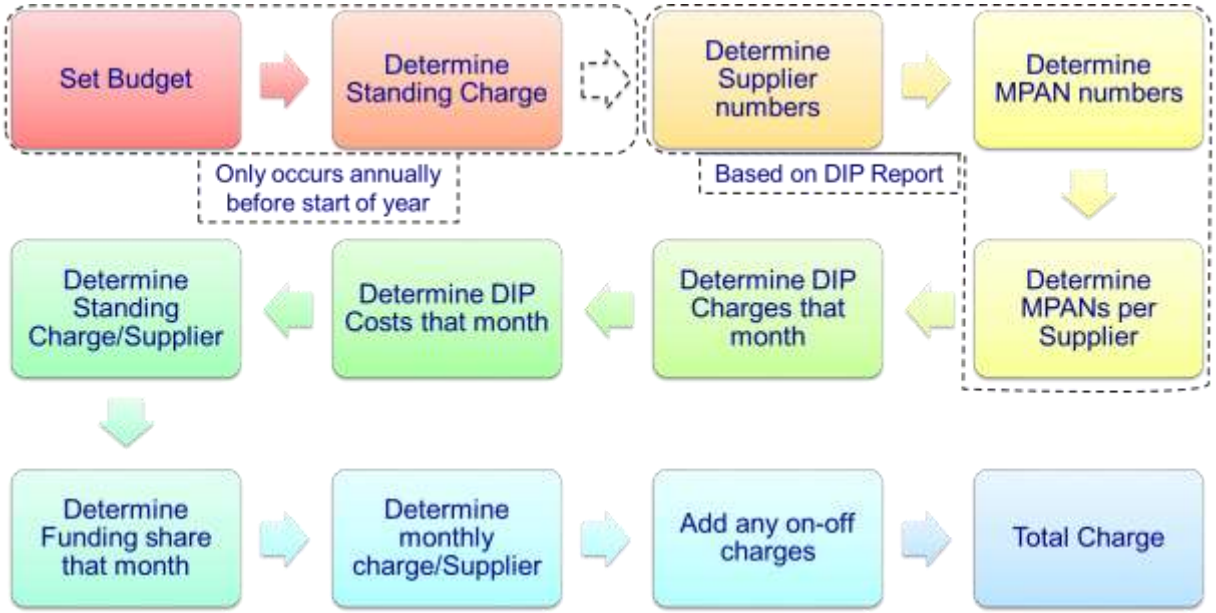


*Figure 8 - Diagram showing the DIP funding process flow*

| Interim Issue Consultation Questions |
|---|
| **Do you agree with the proposed framework for funding and budget?**<br>*Please provide your rationale with reference to the more detailed Business Requirements in Attachment A.* |
| **Do you agree that there should be no credit arrangements for the DIP?**<br>*Please provide your rationale* |
| We invite you to give your views using the response form in Attachment B |


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## Information Security and Data Management

Information security related to how DIP data will be protected, such as encryption requirements and Data Privacy Impact Assessment (DPIA) requirements. Data management considerations involve data requests and open data policy for DIP.

| Data Management and Information Security | |
|---|---|
| Sub-topic | Proposal |
| Data Best Practice Guidance | DIP, DIP Users, DIP Manager, and DIP Service Provider should adhere to the latest relevant International Standards (ISO 27001 and ISO 27002) and relevant Data Protection legislation. On-boarding process will check that DIP Users have appropriate processes in place, augmented by the DIP Manager's guidance. |
| Open Data Principle | DIP Users that generate and/or consume data will be primary contacts for data requests, so the on-boarding will include data access processes. The DIP Manager will provide guidance on Open Data principles. The DIP Manager may still be able to access data and meet data access requests. |
| GDPR | Must be considered by the DIP Manager and DIP Users – Data Controllers have more obligations under the UK GDPR than processors do, because they decide what personal data is collected and why, and exercise ultimate control over the data. It will be the DIP Users responsibility to comply with legislation, not the DIP Manager's responsibility to check adherence. |
| Decision making relating to data access | The default shall be that all open data requests shall be met. The DIP Manager would review the data request, recommending mitigations and conducting impact assessments. Where relevant, costs relating to the data request will be determined by the DIP Manager and agreed by the payer - the participant making the request. |
| Data Ownership | The DIP Manager will not have any ownership of data. The DIP Manager will be a Data Processor due to merely receiving Data and passing it on. The control and ownership of the Data would sit with the entity providing it. |

| Interim Issue Consultation Questions |
|---|
| **Do you agree with the proposed framework for information security and data management?**<br>*Please provide your rationale with reference to the more detailed Business Requirements in Attachment A.* |
| We invite you to give your views using the response form in Attachment B |


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## Legal Text

It is proposed that the DIP legal text will be a Supplement to the BSC. Although still part of the Code, the Supplement will allow greater flexibility and will reflect the separation of the DIP arrangements from the BSC, and allow for portability should the DIP Manager role be reassigned.

Additionally, it will be necessary to amend BSC Section C 'BSCCo and its Subsidiaries'[12] and BSC Section D 'BSC Cost Recovery and Participation Charges'[13]. BSC Section C details the activities that Elexon is able to undertake, and Elexon's authorised activities will need to be updated to include acting as the DIP Manager. BSC Section D will need amending to include cost recovery for the DIP. This will be the most efficient way for Elexon to recover costs for both the DIP and BSC simultaneously, rather than having separate financial systems in place. There may also be some consequential changes to Section H 'General'[14] for example to reflect interactions between the DIP arrangements and the Section H default provisions.

Further to the legal text, there will be at least eight DSDs created:

- DSD1 - General (Governance and Operational Management)
- DSD2 - On-boarding and off-boarding
- DSD3 - Assurance and Reporting
- DSD4 - Change Management and document management
- DSD5 - Funding and Budget
- DSD6 - Data Management and Information Security
- DSD7 - Code of Connection Agreement (developed by the MHHS Programme)
- DSD8 - Public Key Infrastructure (PKI) requirements (developed by the MHHS Programme)

There will also be changes to the BSC and REC required to reflect those Codes obligations to the DIP and the DIP Manager. This will be done via the DIP SCR.

[12] https://bscdocs.elexon.co.uk/bsc/bsc-section-c-bscco-and-its-subsidiaries
[13] https://bscdocs.elexon.co.uk/bsc/bsc-section-d-bsc-cost-recovery-and-participation-charges
[14] https://bscdocs.elexon.co.uk/bsc/bsc-section-h-general


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## 4. Ofgem Requirements

| Summary of how Ofgem requirements in their decision letter have been met | |
|---|---|
| Ofgem requirement | How they have been met |
| DIP arrangements should be bespoke. | DIP arrangements designed from scratch, considering the specific needs of the DIP. |
| DIP arrangements should be flexible. | Employing a Code Manager approach (A-C2) will allow for agile and flexible processes, with the DIP Manager more empowered to make decisions. |
| DIP arrangements should be in line with industry best practice. | DIP arrangements have been designed considering best practice, with input from industry experts, and will be subject to industry consultation. |
| All parties with an interest in the DIP objectives should play an active role in governance. They should have the right to propose and express views on modifications to the rules surrounding access to and use of the DIP. | The DIP change process will be open, with anyone able to propose a change (BR-C2) and engage in consultations. DIP Users will be represented on the DCAB, and there will be a consumer representative (BR-G1).<br>Changes to DIP Messages will be subject to existing open governance EMAR change control processes. |
| If there is voting on change, a consumer representative and innovation representative should be considered. | There will be a consumer representative on the DCAB, and it is proposed that the Ofgem representative could be an 'innovation' representative from their innovation team (BR-G1). |
| It should also be ensured that there is a level playing field in contestable markets. | All DIP Users will be treated equally and fairly with allowance made for their unique circumstances where appropriate (A-G2). |
| The DIP Manager should have the ability to commission independent audits of service performance. | The DIP Manager may use a third party to carry out audits on their behalf (BR-A6). |
| Ofgem suggested two key DIP objectives relating to providing accurate and timely support for settlement, and furthering consumers' interests. | The suggested objectives are included in the DIP Applicable Objectives (BR-C22), alongside three additional objectives. |
| A dedicated Code Manager function should be developed, to prioritise and develop change proposals independent of potentially conflicting commercial interests. | The DIP Manager will employ a Code Manager approach (A-C2). The DIP Manager will prioritise changes, if required (BR-C15). |


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| Summary of how Ofgem requirements in their decision letter have been met | |
|---|---|
| Suppliers should fund core DIP Services relating to providing accurate and timely support for the Settlement process. | Costs for core (Settlement related) activities will be borne by Suppliers (A-F2). |
| The funding mechanism should be based on a connection fee and DIP usage. | The sharing of costs will be based on DIP usage and may include a connection fee (A-F1). MPAN share will be used (BR-F15), as it is predicted to be an accurate indicator for DIP usage (more so than metered volumes). |
| Non-core services should be funded on a subscription basis via reasonable and non-discriminatory access charges. | Costs for non-core services may be passed onto the applicant for data requests (BR-D13) and the Proposer for changes (BR-C37). Subscription costs will not be cost-prohibitive (A-F6). |
| DIP should be delivered in line with Ofgem's Data Best Practice Guidance. | The DIP Manager, DIP Users and DIP Service Provider shall adhere to Ofgem's Best Practice Guidelines[15] (BR-D10). |
| Access to data for third parties must be provided on fair and non-discriminatory terms, and that use of the data itself should be available on the same basis. | All DIP Users will be treated equally and fairly with allowance made for their unique circumstances where appropriate (A-G2). The DIP Manger's open-data policy will adhere to Ofgem Best Practice Guidance and guidance issued by the Energy Systems Catapult on behalf of Ofgem and BEIS (as was). |
| The DIP Manager should also ensure that data is made available to drive innovation in a manner that does not distort competition. | Innovation is included in the DIP Applicable Objectives - facilitate innovation in the energy sector and efficient delivery of services (BR-C22). The Open data policy looks to remove access to data as a prohibitive cost to innovation, however, some allowances are made for resource impacts on the DIP Manager. |

[15] https://es.catapult.org.uk/guide/data-best-practice-guidance/


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## 5. Progression Timetable

The progression timetable for Issue 101 is as follows:

| Issue 101 Progression Timetable | |
|---|---|
| Activity | Indicative Date |
| Industry Consultation on Business Requirement | 14 June – 12 July 2023 (20 WD) |
| Development of legal text, subsidiary documents, and Issue Group reviews | May 2023 – December 2023 |
| Industry Consultation on legal text and subsidiary documents | January 2024 – February 2024 (20 WD) |
| Publish Final Issue Report | March 2024 |

The Issue 101 Issue Group will review the legal text and subsidiary documents in batches, with Issue Group meetings held to discuss the feedback and any questions if required. The months when the reviews and Issue Groups are expected to be held are listed below.

| Issue 101 Issue Group Reviews | | | | |
|---|---|---|---|---|
| Topic | DIP Legal text | DSD | BSC Section | Indicative Date |
| On-boarding and off-boarding | Chapter 2 | DSD2 | - | July 2023 |
| Data Management and Information Security | Chapter 6 | DSD6 | - | August 2023 |
| Funding and Budget | Chapter 5 | DSD5 | Section D | September 2023 |
| Change Management and Document Management | Chapter 4 | DSD4 | - | October 2023 |
| Assurance and Reporting | Chapter 3 | DSD3 | - | November 2023 |
| Governance and Operational Management | Chapter 1 | DSD1 | Section C | December 2023 |

If you would like to join the Issue 101 mailing list, please complete the Modification and Issue Workgroup sign-up form[16].

## 6. How to respond

We welcome your views and responses to the questions set out in the response form in Attachment B. Please send responses, entitled 'Issue 101 Consultation', to bsc.change@elexon.co.uk by 5pm on **Wednesday 12 July 2023**.

[16] https://www.elexon.co.uk/change/modifications/modification-workgroups/modification-and-issue-workgroup-sign-up/


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