

ELEXION

BSC Panel 336

Public Slides

09 March 2023

An aerial photograph of a rural landscape. In the center, a white wind turbine stands in a green field. To the left, a farm with a grey-roofed building and a large group of black and white cows is visible. The landscape is divided into green fields by brown hedgerows. The right side of the image is overlaid with a solid teal color containing white text.

PART I: MODIFICATION AND CHANGE BUSINESS (OPEN SESSION)

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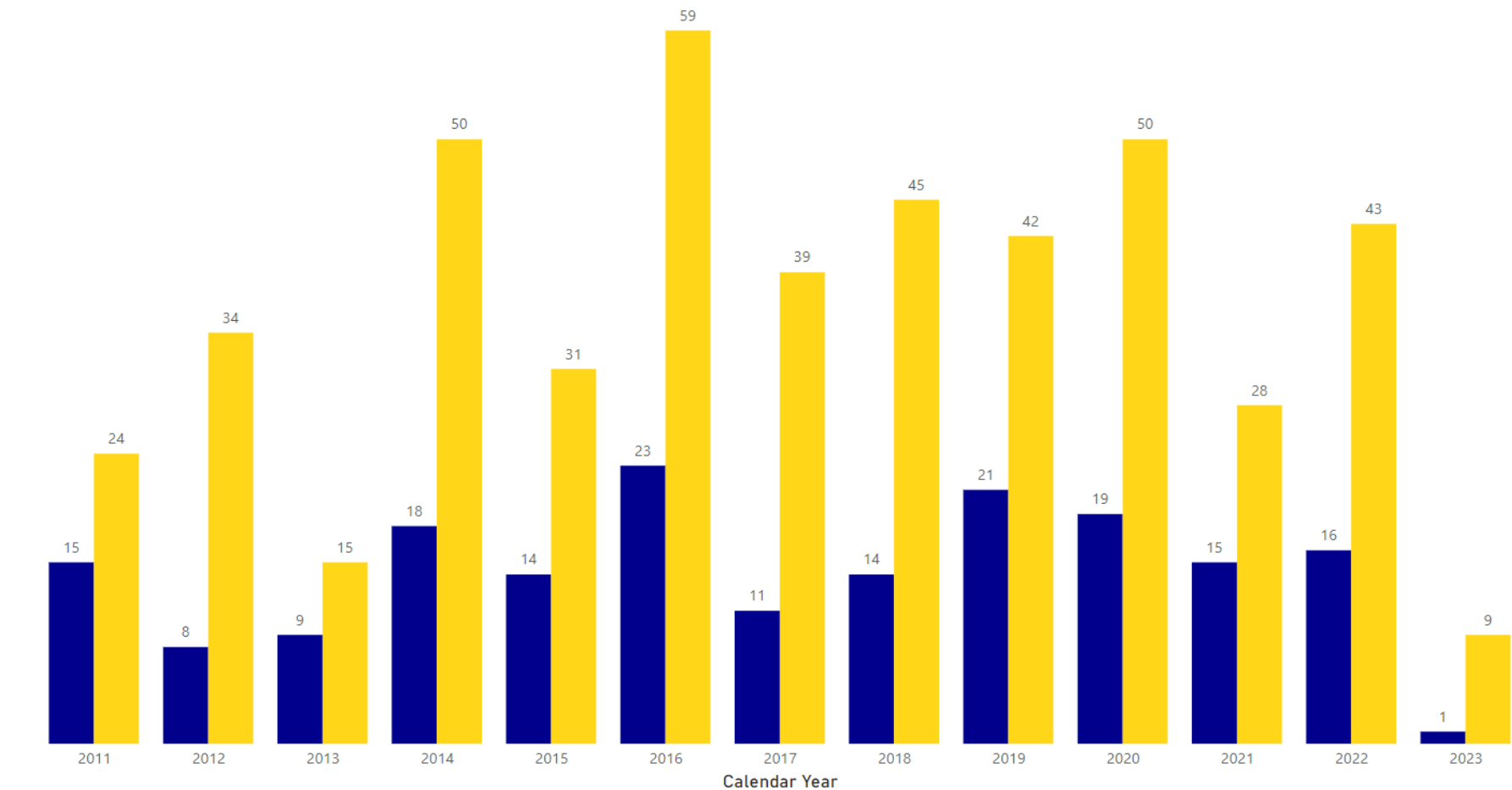
**Change Report and Progress of
Modification Proposals**

336/02 – Lawrence Jones

BSC Modifications raised by year and Workgroups held

How many Modifications raised and Workgroups held?

● Mods raised ● Workgroups (excl. Issues)



BSC Modifications overview

Initial Written Assessment	P451
Assessment Procedure	P412, P415, P441, P442, P443, P444
Report Phase	-
Urgent	-
With Authority (decision cut-off)	P432 (29 Mar 23)
Authority Determined (implementation date)	-
Self-Gov. Determined	-
Fast Track Determined	-
Withdrawn	-
Open Issues	Issue 96, Issue 100, Issue 101, Issue 102, Issue 103, Issue 104, Issue 105, Issue 106

BSC Modifications approved timelines

	Nov 22	Dec 22	Jan 23	Feb 23	Mar 23	Apr 23	May 23	Jun 23	Jul 23	Aug 23	Sep23	Oct 23
P412 'Non-BM Balancing Providers pay for non-delivery imbalance'										AR		DMR
P415 'VLP access to wholesale market'						AR →		DMR				
P441 'Creation of complex site classes'									AR	DMR		
P442 'Reporting FCL for exempt and licenced supply'							AR					
P443 'Cap NGESO Interconnector Trades'								AR		DMR		
P444 'Compensation for VLP actions in the BM'						AR →		DMR				
P451 'System Restoration'												

BSC Change Release Roadmap

2023	2023		2024			Un-allocated
Ad-hoc	Jun	Nov	Feb	Jun	Nov	
-	CP1558 'New Registration data items to facilitate MHHS'	P395 'Final consumption levies'	-	-	P415 'VLP access to wholesale market' (Q4 2024)	P412 'Non-BM BS providers pay non-delivery'
	CP1568 'Inclusion of new LDSO-mastered SMRS data items'	P441 'Creation of complex site classes'			P444 'Compensation for VLP actions in the BM' (Q4 2024)	P442 'Reporting FCL for exempt and licenced supply'
	CP1571 'Clarify the number of Meter measuring elements and measurement transformers'	P443 'Cap NGESO Interconnector Trades' (+2WDs)				MHHS
	CP1572 'Specifying the requirements to provide SLDs for HV and EHV sites'					P451 'System Restoration'
	P432 'HH Settlement for CT Adv. Meters' (29 June 2023 or three months after the Authority's approval)					

Key

Approved

With Authority

Report Phase

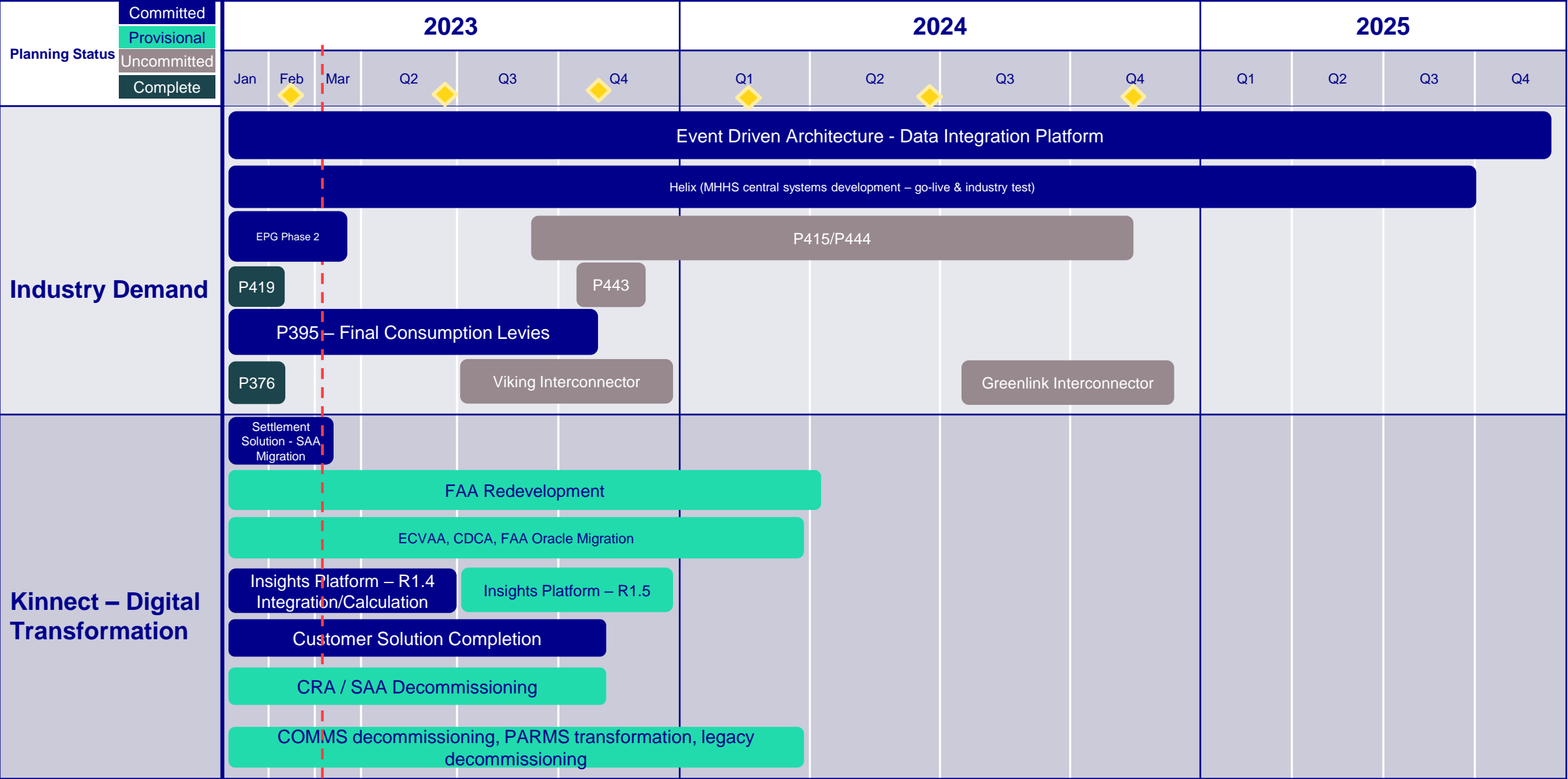
Assessment Phase

Direction

Urgent

Portfolio Pipeline and Plan (Systems impacting change excludes Doc only)

 Denotes Industry release



Current Position

Modification update: P415 / P444

P415 'Facilitating access to wholesale markets for flexibility dispatched by Virtual Lead Parties'

P444 'Compensation for Suppliers and Virtual Lead Parties for Virtual Lead Party actions in the Balancing Mechanism'

- P415 Assessment Consultation issued between 24 January and 14 February received 8 responses
- P444 Assessment Consultation issued between 25 January and 20 February received 4 responses
- NGESO highlighted several concerns over data transparency and potential barriers to entry caused by the addition of Supplier Compensation, which was new information for the Workgroup to consider – this applies to both P415 and P444
- Workgroup met on 22 Feb to consider consultation responses, but further work needed to address NGESO concerns. Therefore at least one further Workgroup meeting needed, following workshops between Elexon and NGESO
- We are aiming to bring the Assessment Report to the April Panel, but believe it prudent to ask for a one month contingency
- We therefore request a one month extension request, returning with the Assessment Report by the May Panel meeting, or sooner if possible for P415 and P444 (as they are being progressed together)

Approach to Issue 93 Modification

‘Amending Metering Dispensation Process, Updating AMP/DMP in CoPs and Clarifying the Relevant CoP’

- Issue 93 ‘Review of the Metering Codes of Practices,’ recommended 14 changes to the BSC (13 Change Proposals and 1 Modification)
- One of these changes was a Modification Proposal to:
 - clarify how to determine the relevant CoP for circuits that are embedded behind the Boundary Point Metering System or the Defined Metering Point (DMP)
 - Improve the efficiency of the Metering Dispensation process related to mismatches between the Actual Metering Point (AMP) and DMP
- We are working with UK Power Networks to raise the proposal next month
- We believe it should progress straight to the Report Phase as:
 - Clarifying existing arrangements, not changing principles of AMP/DMP
 - Solution developed and recommended by Issue 93 group – redlining will be shared with the Issue Group for comment before we raise it
 - Submitting the solution for another Workgroup assessment may not be a good use of BSC Parties’ time

Recommendations

We invite the Panel to:

- a) **APPROVE** a one-month extension to the P415 Assessment Procedure;
- b) **APPROVE** a one-month extension to the P444 Assessment Procedure and
- c) **NOTE** the contents of the March Change Report.

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**P451 'Updating BSC Black Start provisions
and compensation arrangements'**

336/05 – Kayleigh Neal and Paul Mott
(NGESO)

09 March 2023

Facilitation of the Electricity System Restoration Standard (ESRS)

Special Condition 2.2 of National Grid's Electricity System Operator's Transmission Licence, the Electricity System Restoration Standard (ESRS) was introduced in October 2021 and requires

- a. 60% of electricity demand being restored within 24 hours in all regions;
and
- b. 100% of electricity demand being restored within 5 days nationally.

The purpose of this direction is to require that the ESO

- a) Ensures and maintains an electricity restoration capability; and
- b) Ensures and maintains the restoration timeframe.
- c) Replace the definition of "Black Start" with "System Restoration"

The aim is to restore the system and supplies as quickly as possible in the most economic manner

Proposed High Level Grid Code Changes

Grid Code Section	Summary of Update
Glossary and Definitions	Introduction of new definitions – changes to some existing definitions
Planning Code	Data reporting for Restoration Service Providers and Parties forming part of a Distribution Zone
Connection Conditions/European Connection Conditions	Changes to Protection, Control and Governor Settings, amendments to Offshore to enable Offshore Generation to participate in Restoration, broad normalisation of Anchor Plant and Top Up Restoration Plant, introduction of Distribution Restoration Zones/obligations on Network Operators, reinforcement of Critical Tools & Facilities, introduction of Assurance activities
OC1	Notification Demand Data for System Restoration Purposes
OC2	Outage data in respect of Restoration Service Providers and Network Operators
OC5	Enhanced Testing and Assurance requirement including deadline charge and remote Synch tests
OC9	Fundamental restructure to include Local Joint Restoration Plans and Distribution Restoration Zone Plans
BC2, BC4 & General Conditions	Consequential changes
Data Registration Code	Consequential data changes

P451 Overview

- The GC0156 markets and funding mechanisms sub-group report noted an intention that new restoration service providers which are non-BSC parties and which have a system restoration contract should be eligible to claim for avoidable costs if they qualify under BSC section G3 provisions.
- P451 proposes to update BSC Section G to allow non-BSC parties who have a contract with NGENSO to provide System Restoration services to claim BSC Black Start compensation.
- Changes to BSC terminology to reflect the Grid Code terminology change from 'Black Start' to 'System Restoration'. This includes both updating BSC references to Grid Code defined terms and changing the BSC's own defined terms that include the words 'Black Start' (e.g. 'black start compensation' and 'black start instruction').
- Updating BSC cross-references to relevant parts of the Grid Code that have been renumbered by the GC0156 legal text.
- Note that a pair of CUSC mods to update CUSC references to black start are being raised at end of April. Relevant STC and SQSS mods have also been raised.

P451 - BSC Objectives

Objective	Impact	Rationale
Objective (a) – The efficient discharge by the Transmission Company of the obligations imposed upon it by the Transmission Licence	Positive	P451 will facilitate the implementation of NGENSO's new approach to System Restoration set out in GC0156. This new approach will enable NGENSO to meet their new Transmission Licence obligation to satisfy the ESRS that comes into full effect on 31 December 2026.
Objective (c) - Promoting effective competition in the generation and supply of electricity and (so far as consistent therewith) promoting such competition in the sale and purchase of electricity	Positive	The new approach that P451 facilitates should help a wider range of potential service providers to tender for System Restoration Services knowing that if the appropriate circumstances ever come to pass, they can make a Section G3 avoidable costs claim on a comparable basis to BSC parties who are able to make a claim today
Objective (d) - Promoting efficiency in the implementation of the balancing and settlement arrangements	Positive	Without P451 the BSC's Black Start processes and terminology will become outdated and misaligned with other industry codes such as the Grid Code and CUSC, and would no longer be operable/functional as intended

P451: Issue and Proposed solution

Issue

- NGESO is progressing [GC0156 'Facilitating the implementation of the Electricity System Restoration Standard'](#) to:
 - Update all references to “Black Start” to “System Restoration” in the Grid Code
 - Allow Distributed Energy Resources (DERs) to be to be used as Restoration Service Providers. These can be BSC or non-BSC Parties
- Currently, non-BSC Parties cannot claim BSC Black Start compensation
 - GC0156 Market and Funding Mechanisms sub group recommended P451 be raised to address this

Proposed solution

- Update references to “Black Start” to “System Restoration”
- Update cross references to relevant parts of the Grid Code that have been renumbered by GC0156
- Amend BSC [Section G 'Contingencies'](#) to allow non-BSC parties who have a contract with NGESO to provide System Restoration services to claim BSC Black Start compensation

P451: Areas to consider

- In addition to the standard Workgroup's Terms of Reference, we aim to verify with the Workgroup:
 - What type(s) of 'Black Start instruction(s)' would trigger eligibility for a non-BSC Party to receive BSC compensation? Are changes needed to the BSC's definition of Avoidable Costs?
 - How will claims be submitted and validated by non-BSC Parties?
 - How will claims be paid out by Elexon?
 - How will the amounts paid out to non-BSC Parties be recouped/recovered by Elexon?
 - What is the likely volume of non-BSC Party claims and the associated impacts of this?
 - How will implementation of the Grid Code, CUSC and BSC changes be aligned? What are the risks if they do not align at the same time and can these risks be mitigated?

P451: Proposed Progression

- Six month Assessment Procedure
- Workgroup membership
 - Black Start / System Restoration processes
 - Trading Charges and payments under the BSC
 - GC0156 and [Issue 100 'Assessing BSC Black Start processes to support NGESO's Distributed ReStart project'](#)
 - EBGL matters (likely to be impacted)

Event	Date
Initial consideration by the Workgroup	W/B 10 April 2023
Assessment Procedure Consultation (15WDs)	10 July 2023 – 31 July 2023
Present Assessment Report to Panel	14 September 2023
Report Phase Consultation (1 calendar month as required by EBGL)	20 September 2023 – 20 October 2023
Present Draft Modification Report to Panel	09 November 2023
Issue Final Modification Report to Authority	15 November 2023

P451: Recommendations

We invite the Panel to:

- a) **AGREE** that P451 progresses to the Assessment Procedure;
- b) **AGREE** the proposed Assessment Procedure timetable;
- c) **AGREE** the proposed membership for the P451 Workgroup; and
- d) **AGREE** the Workgroup's Terms of Reference.



PART II: NON-MODIFICATION BUSINESS (OPEN SESSION)

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Review of BSC Specified Charges

336/12 – Kathy Ferrari

09 March 2023

Review of BSC Specified Charges Recommendations

- New SVA Specified Charge of £0.01418/SVA MSID per month

	22-23 Budget	23-24 Budget
Number of Metering Systems	31,980,612	32,242,407
SVA Costs calculation		
DTS	2,654,547.17	2,764,075
Profiling	282,167.11	261,883
Teleswitch	1,544,805.54	5,100,000
Performance Assurance	2,189,708.33	1,791,522
Shared agent costs	945,655.60	1,054,178
TOTAL SVA	7,616,883.75	10,971,658
50% of annual costs	3,808,441.88	5,485,829
Monthly	317,370.16	457,152
Specified charge calculation	0.00992	0.01418

- New MHHS Monthly Implementation Charge of £0.05145/SVA MSID per month

MHHS Implementation Management Monthly Charge	22-23 Budget	23-24 Budget
Number of Metering Systems	31,980,612	32,242,407
Annual MHHS Budget	19,471,486	19,904,656
Monthly	1,622,624	1,658,721
Specified Charge Calculation	0.05074	0.05145

- New Notified Volume charge of £0.0006 MWh per month

	22-23 Budget	23-24 Budget
Notified Volumes	1,430,000,000	1,564,000,000
Total ECVAAs Costs	766,608	887,974
Notified Volume charge	0.0005	0.0006

Recommendations

We invite the Panel to:

- a) **APPROVE** the new SVA Specified Charge of £0.01418/SVA MSID per month.
- b) **APPROVE** the new MHHS Monthly Implementation Charge of £0.05145/SVA MSID per month
- c) **APPROVE** the new Notified Volume charge of £0.0006 MWh per month

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**P427 Public Peer Comparison for
Settlement Performance**

Kat Higby, Risk Manager

Click to type document status e.g. Confidential

P427

- Modification P427: 'Publication of Performance Assurance Parties' impact on Settlement Risk' introduces three triggers, which if breached, would result in data and information relating to Settlement Risk being made public:
- De Minimis error thresholds (aggregated market level impact and individual Trading Party level impact) for public notification of accountability for Settlement Errors
- EFR escalation process triggers for public notification of EFR status and contribution to risk where a PAP fails to meet a milestone in its EFR plan following escalation to the PAB for the same EFR plan
- Publication of any data via the Peer Comparison technique, where recommended by the PAB and approved by the BSC Panel

Public Peer Comparison of Settlement Performance

PAB Recommendation

- The Performance Assurance Board has recommended that the BSC Panel approves the routine publication of the Settlement Performance data, which is included within Attachment A of this paper
- This recommendation was made following consideration of P427 Workgroup discussions, which supported this publication as a starting point
- The published data will contain a monthly league table showing the deviation from applicable Settlement standards for each MPID
- The PAB has requested that the .csv made available should include MSID count and be broken down by GSP Group

Public Peer Comparison of Settlement Performance

Intended Benefits

- It is hoped that the publication of Settlement Performance will incentivise poor performing Parties to improve their Settlement Performance in order to avoid reputational impacts from poor performance. Improving competition through transparency.

Frequency

- Published monthly, with data being published a month after it is calculated to allow time for BSC Parties to challenge data they believe to be erroneous prior to publication.

Duration

- On an enduring basis until such time as the BSC Panel determines that continued publication would no longer have a net benefit on Settlement Performance.

Publication Format

- In line with the P427 Workgroup's suggestion we propose to make the data available for download as a .csv while also providing an interactive PowerBI report to enable users to review and filter the Settlement Performance directly on the webpage.

Next Steps

- BSCP533 requires Elexon (on behalf of the PAB) to provide Suppliers with two months' notice that the data will be published
- Should the BSC Panel approve this recommendation, Elexon will send a notification to Suppliers mid-March 2023
- Data will be available for Suppliers to check in April 2023 and the data will be published in May 2023

Recommendations

We invite the BSC Panel to:

- a) **APPROVE** the routine publication of Settlement Performance data under the Peer Comparison technique, frequency of publication being monthly and duration of publication being until such time as the BSC Panel determines publication should cease



PART III: NON- MODIFICATION BUSINESS (CLOSED SESSION)



PART VI: NON-MODIFICATION BUSINESS (OPEN SESSION)

E L E X O N

**Minutes of previous meetings
and Actions arising**

Fionnghuala Malone

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Chair's Report

Sara Vaughan

ELEXON

Elexon Report

336/01

For the Panel's information, summarising recent activities and developments within Elexon and the Balancing and Settlement arrangements.

Elxon Kinnect: Migration and reconciliation of Settlement solution data complete with good progress on Production testing and service transition preparation

Settlement Solution

Data migration and reconciliation are now complete. The project is now focused on service transition, business readiness and Production Environment proving in order to complete go-live in April 2023.

The Funds Administration Agent services continue in its discovery phase to determine the calculation and finance system requirements so that a replacement project can kick off in April 2023. The review of BSC Section N Clearing, Invoicing and Payment has started and will determine the scope for a potential BSC Modification to gain efficiency and reflect modern banking practices.

Insights Solution

Development of Iteration 4 of 5 of the Insights solution to replace BMRS started in first week of January 2023 with a plan for completion by end June 2023. This will include development of the REMIT portal. Full completion of the Insights Solution is expected by end December 2023 with cutover to Production in Q1 2024 and decommissioning of legacy BMRS functionality in Q2 2024.

We expect to bring a BSC Modification request to the Panel in April in order to allow removal of the obligation to provide BMRA data via the High-Grade Line in order to provide material cost savings to BSC Parties. We will be engaging with TIBCO users in order to discuss and facilitate the intended change.

Customer Solution

Modifications P376 and P419 were successfully cutover to Production in February 2023. Analysis and design work on P395 is continuing.

Additional functionality will be built into Customer Solution to allow the CRA system to be decommissioned without reduction of functionality across the estate as part of the Oracle Migration project. Design and requirements capture for this work will begin in March now that P376 and P419 are complete.

Migration of Legacy Agents to Oracle Cloud Infrastructure

Initial planning for the migration of all On-Premises hosted enduring legacy Agents to Oracle Cloud Infrastructure has been drawn up. Initial shaping, development of environment, and application build scripting will be completed by May 2023 with a full migration project targeting completion in mid-2024 to be mobilised.

Elexon Kinnect: Budget update

Overall, the Kinnect Programme remains on budget with £32.5m of investment in progress, of which £30.9 m has been spent to date. The remaining £15.4m is forecast for future work to conclude migration of the legacy systems to the digital platform in 2023/24 and we have £6.0m remaining contingency.

These figures are also shown in the table below:

CTD (£m)	Committed	FTC	Contingency	Forecast Outturn	Budget	Variance
30.9	1.6	15.4	6.0	53.9	53.9	0

Elxon Helix: Current project status

The development work continues to make good progress with all objectives being achieved to plan. The programme has taken on the Performance Assurance work and is currently planning this work to align with the remainder of the programme.

The Helix team is working with a number of constraints that are impacting certainty of the forward plan:

- The transition design has yet to be issued by the MHHS Programme, which means that the Helix team is prioritising development work based on the information available, to minimise the assumptions being made. The impact of this will be analysed when the transition design is issued.
- The Helix development is working towards the end of October for completion with a stretch target for the end of September. This date was included in the Round 3 re-plan issued by the MHHS Programme as the end of the Design Build Test (DBT) phase.
- The Helix team is working with the MHHS programme to clarify the requirements for the end of DBT and the start of Component Integration Testing (CIT). This will allow Helix to confirm if the dates are achievable.
- The Round 3 re-plan baseline sign-off by Ofgem has been pushed back by a month to the end of October while MHHS Programme works through some clarifications with other participants.

Elexon Helix: Budget update

Overall, the Helix Programme remains on budget with £28.4m of investment in progress, of which £19.7 m has been spent to date. The remaining £14.6m is forecast for future programme increments to deliver the remainder of the Helix programme. There is also £3.1m and £3.3m held separately for the Performance Assurance impact and programme contingency, respectively.

These figures are also shown in the table below:

CTD (£m)	Committed	FTC	Performance Assurance Contingency	Programme Contingency	Forecast Outturn	Budget	Variance
19.7	8.7	14.6	3.1	3.3	49.5	49.5	0

Key KPIs: January 2023

KPI	Target	Status
Performance against budget	Percentage (Under)/Over Spend Full Year Forecast vs. Budget complete >(5)%	(1.31%) - ON TARGET
Core system availability (BSC Agent Services)	99.50%	99.94% - ON TARGET
Service Desk performance against SLAs	99.99%	100% - ON TARGET
Settlement Accuracy (total change in Trading Charges across all run types as a percentage of total trading charges)	<5%	4.8% - ON TARGET
Modifications: number of Ofgem send backs	<=2 in a rolling 12 month period	2 – ON TARGET
Code Admin: % of Panel and Committee papers delivered on time	90%	91.2% - ON TARGET

Recommendation



We invite the Panel to:

- **NOTE** the contents of this paper.

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National Grid Report

Jon Wisdom

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Ofgem Report

Colin Down

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**Imbalance Settlement Group update to the
BSC Panel**

Verbal Update – Iain Nicoll

9 March 2023

What's gone well?

- CP1566 'Introducing the CVA Commissioning End to End Check (CEEC) process'
 - Process to capture undetected Metering Equipment commissioning errors
 - Identified issues can be identified and resolved shortly after energization
 - Mitigates the risk of Settlement Error and avoids Trading Disputes
 - Implemented in the November 2022 BSC Release
- Issue 93 'Review of the BSC metering Codes of Practice'
 - Two more CPs have been progressed to be implemented in June 2023 BSC Release
 - CP1571 'Clarify the number of Meter measuring elements and measurement transformers'
 - CP1572 'Specifying the requirements to provide SLDs for HV and EHV sites'
 - Five now delivered
 - Project plan to deliver remaining aspects
- Metering Dispensations
 - Progressing Metering Dispensation applications for multipurpose sites, behind a single point of connection, to be traded separately (e.g. renewable generator and battery energy storage system) as part of industry Net Zero
 - Modification being proposed to standardize the arrangement:
 - Amend Metering CoPs to limit need for Metering Dispensations where only for location
 - Amend Metering Dispensation process to speed it up in limited circumstances i.e. only for location where compensation for losses has been applied

What challenges does the Imbalance Settlement Group face?

- **Membership**
 - Currently only have five Members (one of them has given notice of resignation)
 - External communications to recruit new Members
 - No responses to date
 - Industry contact being used to find new Members
 - One expression of interest
- **Review learnings from current NGESO stability pathfinder projects (to address stability issues in the electricity system created by the decline in transmission connected synchronous generation)**
 - Look at future and dependencies and conflicts with the BSC (e.g. Metering Codes of Practice and Metering Dispensations)
 - NGESO to present at April ISG meeting
- **Interconnector Trading**
 - ISG Members felt that the NGESO guides were not sufficient to explain how interconnectors operate, and that more transparency was required for SO-SO transactions
 - NGESO representative to discuss concerns internally and report back to ISG

What is coming in the future?

- Cessation of current communication technologies by network operators (such as Public Switched Telephone Network (PSTN), 2G and 3G)
 - Issue 93 (Review of the BSC metering Codes of Practice) the emergence of new communication technologies) discussed how this will affect the non-smart remote communication metering portfolio;
 - Proposed changes in regulation that can make this transition easier and lessen the risks to Settlement that these developments will bring.
 - Presentation on issue given by SME
 - RFI being prepared on options
 - Following RFI CP to be progressed

MEETING CLOSE

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THANK YOU
