

# ELEXON

BUSINESS PLAN  
2021/22



# CONTENTS

|                                  |    |
|----------------------------------|----|
| Overview                         | 03 |
| Our Priorities                   | 08 |
| Supporting Market Transformation | 11 |
| BSC Rules Management             | 21 |
| Assurance                        | 26 |
| Customer Engagement              | 28 |
| Our European Facing Work         | 33 |
| Electricity Market Reform        | 35 |
| Budget for 2021/22               | 37 |



# OVERVIEW





**Mark Bygraves**  
Chief Executive Officer

---

**2020 was one of the most challenging years that the energy sector and the wider economy have ever faced. Despite these difficult days, our industry continues to rapidly evolve, experiencing its longest ever period for coal-free electricity generation of 67 days, almost quadrupling the previous record from May 2019.**

However, Elexon's key priority has not changed. As trusted independent experts, we must carry on delivering our Balancing and Settlement Code (BSC) 'end-to-end' management services to our historic high standards, whilst always providing value for money. Our 2020 customer survey highlighted increased satisfaction with our adaptability, and the reliability of our services and we will strive to build on these to aid our customers.

To achieve these priorities it is essential we maintain our high levels of customer focus, invest in our systems and processes and ensure we retain and attract the necessary talent and skills. This 2021/2022 business plan details how we will work with our stakeholders to deliver on our priorities and act with the industry to facilitate a low carbon future.

Supporting progress to net zero is of utmost importance to us. We have reflected this when developing a new corporate purpose: 'Serving at the heart of the energy industry, building a path to net zero'. You will find many examples in the business plan of how we are enabling innovation for the benefit of consumers and facilitating the changes needed to support the energy transition. We continue to make the case for consolidation and simplification of energy codes and the central market landscape to help deliver the transition.

---

The 2021/22 budget is broken down later in this business plan. As we always do, we have taken a prudent view of what we need to run the business and invest in necessary systems upgrades. However this year our focus is evermore acute, as we fully recognise the pressures faced by our customers.

In 2020/21 we served more BSC Parties, progressed more Modifications and Workgroup meetings, delivered significant changes to systems and concluded a complete review of our Performance Assurance regime. All the indications show this increasing demand for our services will continue into 2021/22. However, despite this, after taking into account indexation and inflation, our regular activity shows a decrease of £0.4m (1.0%) against the 2020/21 budget, and with our headcount almost unchanged.

Our existing systems rely on ageing architecture that has been in place for many years. The industry has benefitted from our approach to prolong the life of those assets for as long as possible. However, in the face of the enormous volume and complexity of change that is increasingly required, it is not sustainable or wise to sweat the use of them for much longer into the future. That is why we embarked on our investment programme two years ago.

There is a window of opportunity in 2021/22 for us to continue the investment necessary to deliver our new digital platform 'Elexon Kinnect'. This will reduce the risk of performance of the existing systems deteriorating and being unable to adapt to meet future challenges, which could impact on Settlement accuracy and stability. This is leading to a £12.5m increase in the Projects and Investments part of our budget for 2021/22.



**Michael Gibbons CBE**  
Chair, Elexon Ltd and the BSC Panel

---

In its feedback on the initial version of the business plan published in December 2020, the independent BSC Panel stated that if Kinnect is not delivered then it is likely to 'put at significant risk functional delivery of Market-wide Half Hourly Settlement (MHHS) as well as compliance with many operational KPIs.'

Elexon Kinnect is a cloud-based digital platform. By nature this means that it will be flexible and scalable to suit the needs of our customers. The modular technology it uses will enable us to implement BSC rule changes more quickly, and provide speedier support for innovation by existing companies and new entrants.

In January 2021 we launched the first outward facing component of Kinnect, the Customer Solution, which will digitalise market entry processes and make processes simpler for all our customers. During 2021 we will further develop the Settlement Solution calculations engine as well as designing a new Insights Solution which will eventually replace the Balancing Mechanism Reporting Service (BMRS) to process and publish open data on the wholesale market. The £12.5m increase will help to fund the delivery and development of these Kinnect components. We explain our approach, and the benefits of the platform in more detail, later in the business plan. Overall, Kinnect will make it easier for all of our customers to use our services, and they will gain clearer insight into the wholesale market.

---

In the future there will be a much wider variety of participants in the electricity market, including a major increase in distributed generators and demand-side response (DSR) providers. The opening up of the Balancing Mechanism (BM) by Elexon and National Grid ESO to independent aggregators in 2019 through P344 'Wider Access' is an example of what we have done to create more opportunities for participants to compete in markets.

In the Rules Management section of the business plan we explain how other Modifications will create further opportunities. We expect that the clear insights and detailed information on the wholesale market available through the Kinnect Insights Solution will play an important part in helping companies to develop new products and services.

For a number of reasons, during 2020 we experienced delays in implementing Kinnect. This included us having to divert resources so that we could rightly meet requirements to support Project TERRE (Trans-European Replacement Reserves Exchange) and its changing timelines. Elexon is a not-for-profit entity, funded by electricity market participants, and is therefore unable to carry forward any unused budget to subsequent years. Any unused funding for Kinnect has always been returned to BSC Parties. This is why, for example, investment of £10m allocated to deliver components of Kinnect in prior business plans (2018/19 and 2019/20) was returned to BSC Parties.



---

A Modification would be required for Elexon to change this practice. We will consider alternatives for our funding arrangements which could allow Elexon to retain unused balances from one year, to use the following year. We will gauge industry's appetite for this before suggesting any changes. Alternative arrangements could smooth the impact that year to year changes in our budget may have on our customers. However we recognise that some Parties may still prefer to have unused budget returned each year.

Over the coming year, in parallel with progressing Kinnect, we will still need to meet commitments to support reforms such as Ofgem's Targeted Charging Review (TCR) and any other regulatory or industry driven changes. Nevertheless, we anticipate that 2021/22 will be a key year for delivering further Kinnect components.

We are aware that any increase in our budget is challenging for our customers which is why, as early as September 2020, we returned £1.5m to them reflecting savings made on overheads during the COVID-19 lockdown and our decision not to award staff a pay rise. However, we remain focused on value for money and were pleased to see that our customers recognised this in our annual customer survey.

Elexon and the BSC Panel worked closely together in reacting to the COVID-19 lockdown. In 2020 we swiftly introduced derogations and changes to BSC rules which eased the burden for Suppliers of compliance with Settlement arrangements.

---

In August 2020, the Panel published its two-year strategy for 2020 to 2022 which included supporting the conclusion of the Ofgem/BEIS Energy Codes Review on whether the current 11 energy codes could be consolidated into a new set of simpler and streamlined arrangements.

The Panel's strategic objectives include the roll out of Kinnect and implementing the BSC Sandbox (where companies can trial concepts without having to meet the usual BSC rules). The Panel is also focused on Modifications which directly support progress to net zero. All of these are complementary to Elexon's priorities over the coming year.

MHHS is a key step towards a smarter system. It will enable new business models and services such as 'vehicle to grid' technology and electricity storage. It will also encourage peer to peer trading, demand-side response (DSR) and time of use tariffs.

In April 2021, Ofgem confirmed its final decision to implement MHHS with an expectation that this will be completed by October 2025. We are very pleased that Ofgem has appointed Elexon as the Senior Responsible Owner (SRO) and Programme Manager (PM) for MHHS. The role includes managing the transition to MHHS and coordinating the activity of more than 180 organisations across the sector. We look forward to continuing our work with BSC Parties and stakeholders on this.



The costs for the MHHS implementation programme will be paid for by Suppliers, as set out in the Modification P413 alternative, which was approved by Ofgem in April 2021. In July 2021, Elexon's Board has approved a budget of £14.5m for the first year (2021/22) of the implementation programme, noting that this included a not insignificant level of contingency given the uncertainty of costs at this stage. More information is available in our statement on the budget approval.

Shortly before Christmas 2020, the Government published the long-awaited Energy White Paper. We welcome the proposals and look forward to playing our part by working with the industry and our stakeholders to put these changes in place to build a path to net zero.

Ofgem has proposed that the electricity system operator (SO) role is delivered by an independent body that is completely separate from National Grid. Assuming this is adopted, we hope that the move to greater independence in the electricity SO will support the rapid changes we are seeing in the market and provide much needed clarity on future arrangements. We will support the detailed design and specification of whichever solution stakeholders adopt.

**"Serving at the heart of the energy industry, building a path to net zero."**

Elexon's new corporate purpose

We believe that the Government and Ofgem have a golden opportunity to complete the Energy Codes Review by consolidating and simplifying the codes, alongside reforms to the SO roles. We published our latest Policy View in February 2021 where we propose options for achieving this. You can read more about this on page 24.

The way in which we deliver our services is as important as the services themselves. We have reorganised our internal teams into a new structure to improve how we work and how we interact with customers. It will help us to deliver the lifecycle of change more effectively and to retain knowledge and build on our existing capabilities. In short, it helps us to operate more effectively. These changes took effect from July 2020 and already we are seeing the benefits in the way we support our customers.

Our thanks go to the Panel and BSC Parties that provided feedback on the business plan. We believe that it sets out the right areas for us to prioritise over the coming year, so that we can deliver what our customers need in the short, medium and long term.

**Mark Bygraves**  
Chief Executive Officer

**Michael Gibbons CBE**  
Chair, Elexon Ltd and the BSC Panel

# OUR PRIORITIES





# Our priorities and the products we deliver for customers

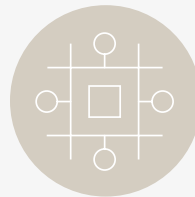
## Our priorities are to:



**01**  
Provide our existing services to industry leading standards



**02**  
Enable and support innovative consumer-facing solutions



**03**  
Consolidate and simplify central market arrangements

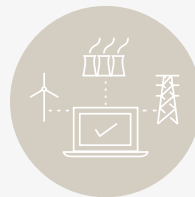
## And we will carry these out by:



**01**  
Engaging with our stakeholders and delivering a truly customer-centric service



**02**  
Delivering value for money and transparency in our operations, building on our not-for-profit funding model



**03**  
Providing a flexible, scalable and open digital platform to meet the needs of the changing energy market



**04**  
Retaining, attracting and developing our expert colleagues to support our stakeholders

# The services we provide to our customers

**We provide a number of services, or products, to our customers and our new organisational structure aligns our people and processes with those products. This promotes greater agility, accountability and customer centricity throughout Elexon. It also ensures that we deliver on the key priorities outlined on the previous page.**

## **Customer Solution**

Management of entry, asset registration, and exit of Parties from the BSC through the Customer Solution for our new digital platform

## **Settlement and Invoicing**

Calculation and invoicing of Settlement payments, our work to support Ofgem on MHHS and the migration of Settlement calculation arrangements to our new digital platform

## **Analysis and Insight**

Continuing to make data on the wholesale market available, and producing analysis and insights on BSC data to inform stakeholders, plus migrating the BMRS to a new Insights Solution on our digital platform

## **Rules Management**

Managing BSC governance (via Committees and the Panel) and leading the BSC change process of Modifications and Change Proposals up to approval

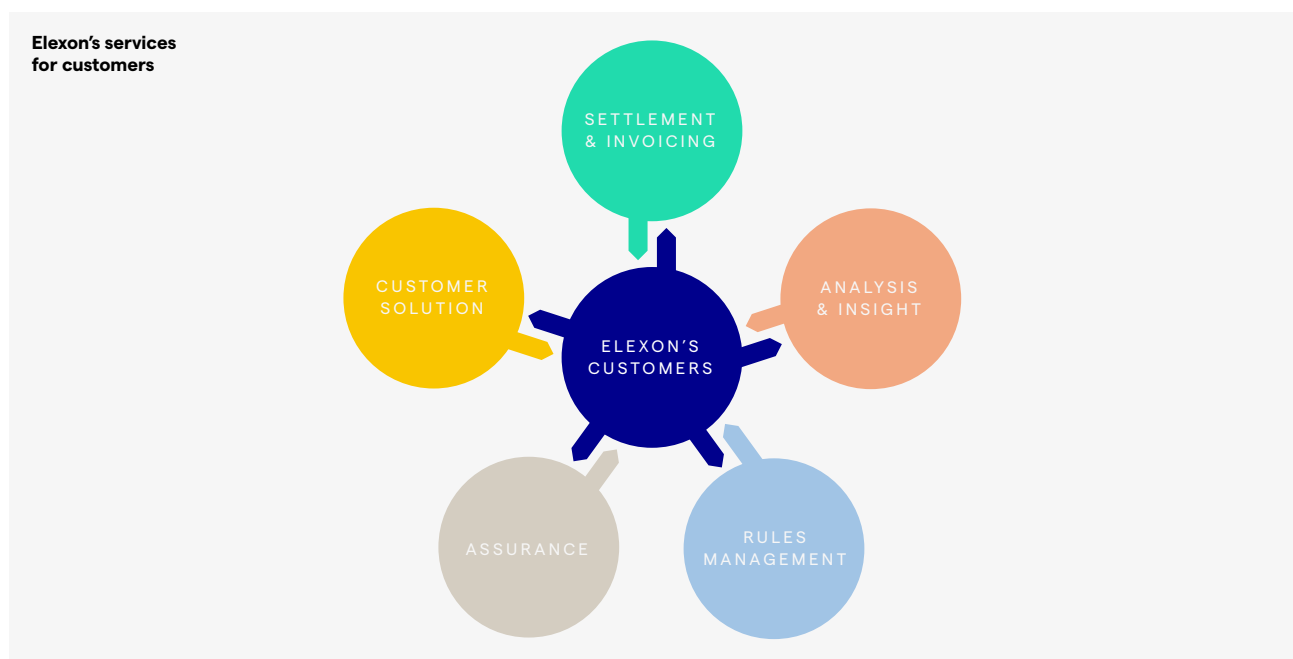
## **Assurance**

Assurance to BSC Parties on the quality of Settlement calculations, by managing Settlement Risks, including ownership of the Performance Assurance Framework

In the first section of this business plan we have grouped together Customer Solution, Settlement and Invoicing, and Analysis and Insight as they all depend on the continuation of our Kinnect digitalisation investment programme. We also refer to our other work which supports market transformation such as open data, MHHS and the BSC Sandbox.

This is followed by two further sections, Rules Management and Assurance.

Finally there are sections on activities that are not products in their own right, but are equally important, namely our customer engagement activities which include our highly rated Operational Support Manager (OSM) service, our people strategy to attract and retain talent, and our European facing work, which will continue regardless of Brexit.



# SUPPORTING MARKET TRANSFORMATION



---

## Supporting market transformation and making it easier for customers to use our services

---

**In this section we group together the services we provide via our Customer Solution, Settlement and Invoicing, and Analysis and Insight products. We also describe activities linked to those products such as our focus on open data, changes to Market Domain Data (MDD) and the BSC Sandbox before explaining our planned work to support innovation and the move to MHHS.**

For each of the three products we describe the investment we are making in our systems to provide a flexible, scalable and open digital platform to meet the needs of the changing energy market. We will ensure that we continue to provide those products in an efficient and effective way.

Both our market entry service and day to day dealings with BSC Parties have continually received high recognition in our annual survey of customer satisfaction. Similarly, the dependency and accuracy of our Settlement and invoicing service receives very positive comments from customers.

However, the technical architecture of the BSC Central Systems is now 20 years old. While it has served our customers well, it needs to be replaced and modernised to meet the needs of a decentralised energy market and maintain the high standards demanded of us. We need to make sure that the systems used by established companies and new entrants are intuitive, easy to manage and less resource intensive for our customers.

Consequently, one of the most important areas of our work over the coming year will be continuing the deployment of our new digital platform – 'Elexon Kinnect'.

We have been preparing for Kinnect since 2017 when Elexon's board approved the development of the new platform. We have made Parties and the BSC Panel aware of progress regularly. This includes our updates through circular letters to Parties from Michael Gibbons, Chair of Elexon's board and the BSC Panel. We have also provided updates in our business plans, annual BSC meetings and through engagement with individual Parties.



---

## Supporting market transformation and making it easier for customers to use our services (continued)

---

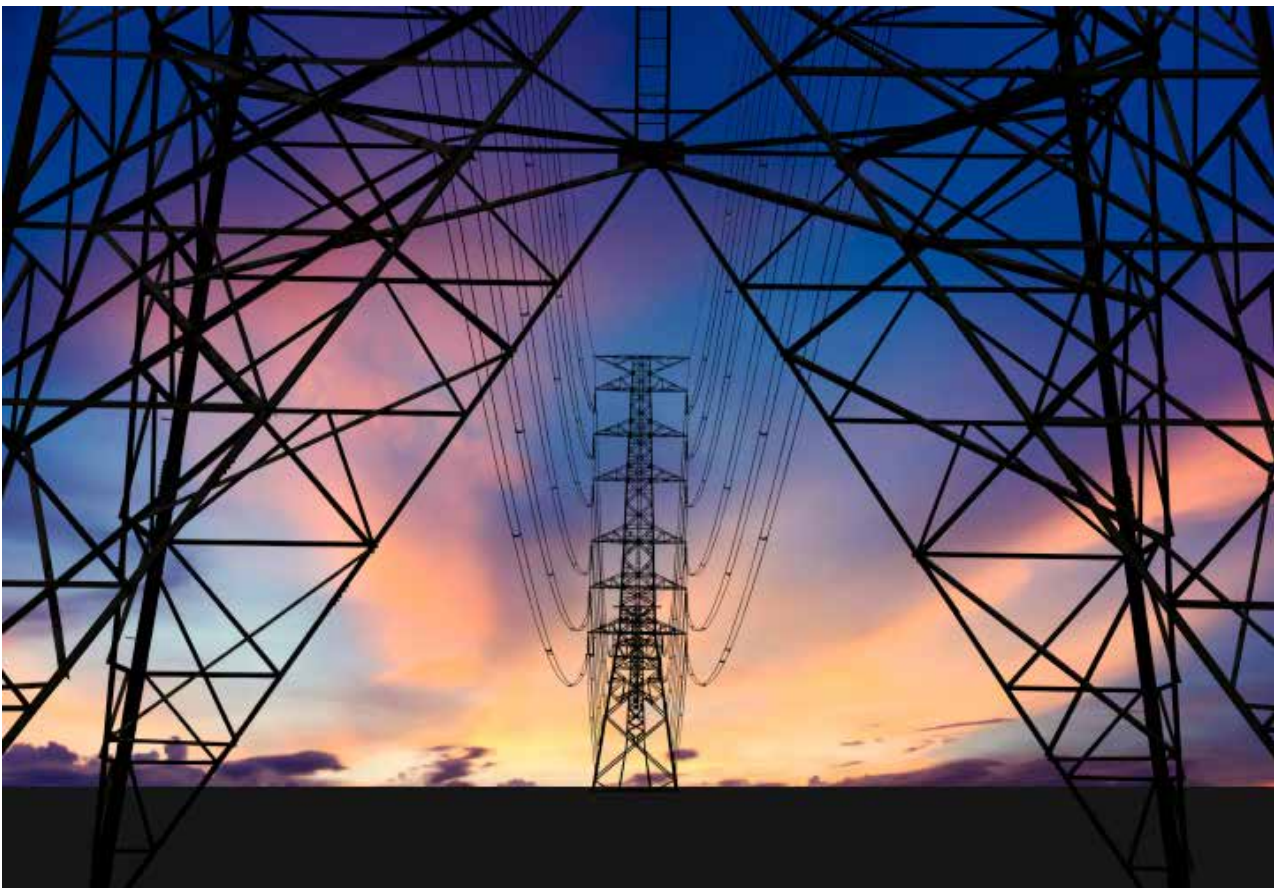
As part of the implementation of Modification P344 'Wider Access' in December 2019, we started delivery of Kinnect by introducing the new Settlement functionality which allows Virtual Lead Parties (VLPs) to enter the market and participate in the BM.

As explained in the Overview, we have had to prioritise the delivery of Project TERRE, ahead of the continued development of Kinnect, which has slowed down the roll out of the new platform. However, we have identified 2021 as a key year for resuming progress.

We must continue delivery of Kinnect so that it can support increased decentralisation and innovation in the energy system.

The cloud-based services that Kinnect offers can be quickly expanded and changed to manage the rapid evolution in the sector. The current BSC Systems will not support swift changes in this way, as they were designed for a centralised model. Therefore there is a significant risk that they will not be able to cope with the demands of our customers for quicker BSC rule changes, more support for innovation, and new Settlement functionality in the future.

Ultimately, deploying Kinnect will result in a much better user experience and better value for money on BSC services, for all of our customers regardless of their size.



# Supporting market transformation and making it easier for customers to use our services (Continued)

Kinnect is a 'cloud native' solution comprising three parts (as shown below). A cloud-based platform has many advantages over the legacy systems we currently use. For example, Kinnect is flexible and scalable to meet the future needs of the system, made possible by the ability to rapidly change or expand the service when needed, in the cloud.

It is designed to be a resilient, modular system, enabling it to be re-configured and expanded if needed to support faster changes to code rules than is possible at present. For example, we can configure it to support many parallel BSC Sandbox trials and change individual modules without affecting the wider system. Kinnect is much more than moving existing processes into the cloud environment, it is also about recreating those processes for the future. We provide more detail in the following paragraphs, including our work on Digitising the BSC text to make the code itself more accessible (see the Rules Management section for more information).

# Customer Solution: making our services more accessible to Parties

In January 2021 we launched the Customer Solution and so far the feedback from Parties has been very positive. The Customer Solution removes the cumbersome form filling and paperwork that companies must complete either to manage their existing account, or to enter the market. For new entrants, the Customer Solution provides a simple, online process for acceding to the BSC and completing market entry.

Active companies can register new assets, register for new roles and manage their own details. For example, it will be far easier for them to make changes to 'authorised signatories' (colleagues within their company who are designated to make changes to the company's BSC account) as this will be handled through an automated process.

Digitalising the BSC with Kinnect will save time and resources for our customers and also for Elexon. For example, the platform will actively feedback on tasks the companies need to complete, or assign tasks for Elexon to finalise their registration. Then, after using the online platform to accede to the BSC, participants will be able to follow a straight-forward customer journey for market entry which guides them through the required steps before they can go live as a fully qualified market participant.



# Settlement and Invoicing: Migration of Settlement calculation services to Kinnect

Settlement calculations are at the core of Elexon's role and these processes are at the heart of the services we provide to Great Britain's electricity market. We need to invest during 2021/2022 to migrate Settlement to Kinnect in order to future proof the arrangements so that they can serve our customers today, and in the years to come.

The Settlement Solution in Kinnect establishes several modular components, which will each access data storage and processing technologies that can be developed quickly in response to changes in market rules, without unduly impacting other services.

Currently, even routine changes to the BSC can take around a year to implement, with at least a third of that time spent carrying out testing and regression testing of the solution. This is because successive changes have been layered onto the BSC systems over the past 20 years. The modular, cloud-based technology we are using for Kinnect will help us to reduce costs and timelines for change implementation. If we do not go ahead with the Kinnect Settlement Solution there is a risk that BSC systems will not be able to keep pace with the rapid rate of change that will be needed in code rules to support net zero.

The advantage of managing BSC change with Kinnect is that it uses unique self-contained algorithms, which could be individually replaced to deliver large scale changes, or discretely modified for routine changes. All this can be done without impacting on the rest of the Settlement applications, which in turn reduces the need for the time-consuming end-to-end testing we must currently carry out to implement rule changes. New data storage and processing technologies will also

enable access to the BSC data within the Settlement calculations. This can support our initiatives to make data held by Elexon openly available via Application Programming Interfaces (APIs).

Settlement calculations are those defined by the BSC that determine critical outputs such as BM Volumes, Imbalance Prices and each Party's Trading Charges. The most significant calculation activity to be migrated is that which performs the daily Settlement Runs, known as the Settlement Administration Agent (SAA).

Once the legacy SAA functionality has been migrated, other BSC Agent calculation services will be migrated to the Settlement Solution, for example the Supplier Volume Allocation Agent (SVAA) activity, which aggregates Supplier metered volumes for Non HalfHourly and Half-Hourly consumption.

In addition to the move to Kinnect, the new SVAA will incorporate the necessary changes for MHHS. As requirements for the MHHS solution are made clear from the outcomes of the Architecture Work Group (AWG) during 2021/22, the new solution and migration of SVAA will progress. The AWG is an Elexon-led industry workgroup developing the solution architecture required to enable the MHHS Target Operating Model (TOM).



“Without Elexon's support, the electricity industry would not move at all; no-one would be able even to understand what needs to change, let alone bring about changes, other than those with decades of experience and large regulatory teams.”

Elexon customer survey 2020

# Analysis and Insight: developing a new solution

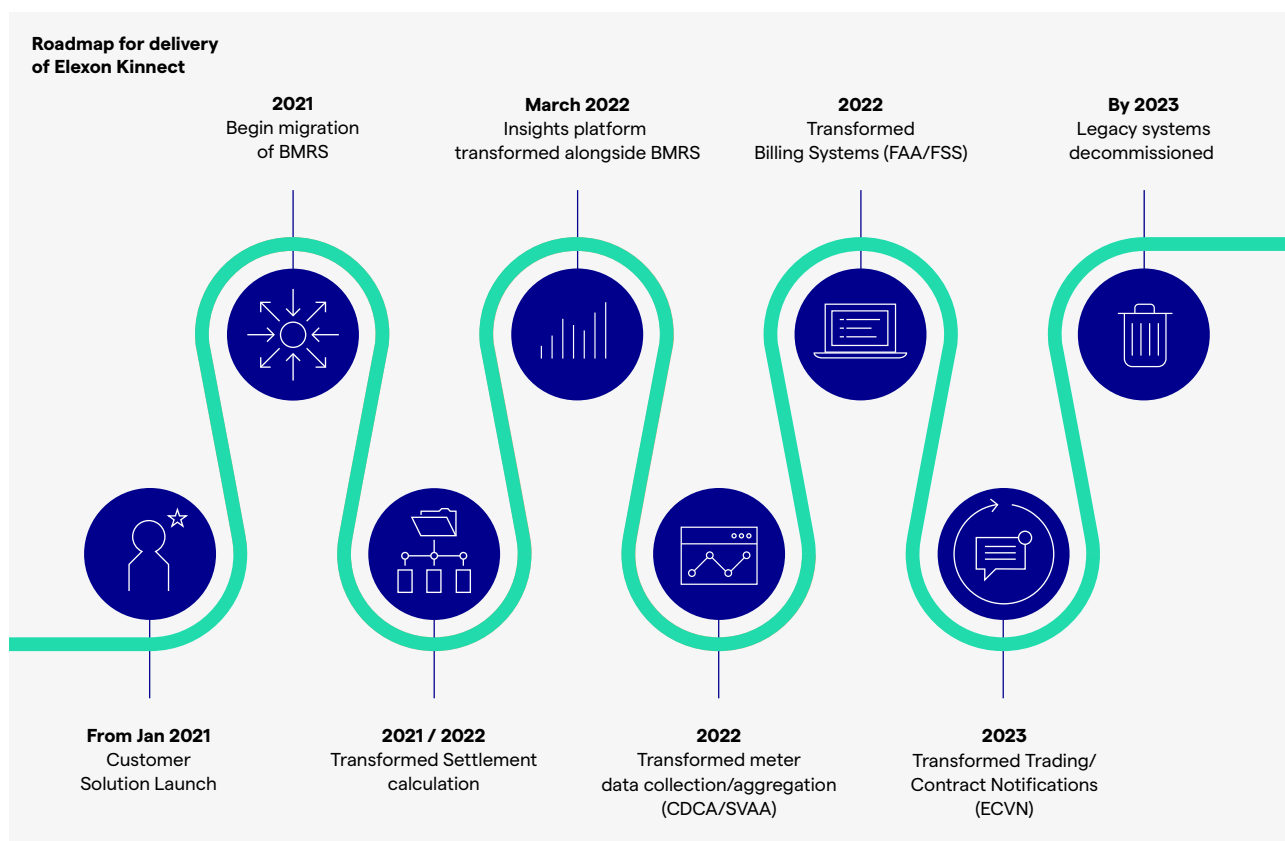
A growing part of our role is to provide clear transparent, accessible energy data on the wholesale market through the BMRS, which is the industry's 'go to' source of statistics on demand, generation, System Prices and other indicators.

We know from the high scores in our annual customer satisfaction survey that industry values and needs access to BMRS data and we want to ensure this service will meet the rapidly growing requirements of our customers in the future. We will continue to use this data to provide analysis on key trends for our stakeholders over the coming year, through our [insights articles](#).

It has become increasingly difficult to make changes to the BMRS software platform at the pace we need, and to support the needs of our customers for new data or functionality. Therefore, the third pillar of Kinnect is to develop a new data and insights capability, to deliver BMRS data.

During 2021/22 we will begin work to migrate BMRS to Kinnect, which will receive, publish and process accessible data for the industry. As a cloud-based service it will leverage storage and processing capabilities at scale. In the future customers will be able to 'self-serve' data requests and perform ad-hoc analysis to suit their own needs, so making the insights more valuable to industry.

By the end of March 2022 we expect to be running the new platform in parallel with the existing BMRS service. We will continue the development of new capabilities such as a 'data push' service integration, and migrate all BMRS data and functionality across including the REMIT service.





---

## Progress on P398 'Open Data' Modification

---

We believe in providing open access to our data and we already provide access to BMRS data for free under an open licence. Some code administrators charge for access to their data. Previously we have only charged non-BSC Parties for access to data flows sent from BSC Systems. BSC Parties can receive these data flows for free.

Following the recommendations of the [Energy Data Task Force](#) we worked with the BSC Panel to bring forward [Modification P398](#), which requires that all data held by Elexon is assumed to be openly available, unless the Panel decides there is a specific reason why it should not be. In February 2021, Ofgem approved implementation of P398 and therefore 2021/22 will see more BSC data being made available to more organisations free of charge. Access to open data is part of our support for progress to net zero, as it helps the development of new business models.

---

## Managing major changes to Market Domain Data

During 2021/22 we will be overseeing the introduction of a much larger Market Domain Data (MDD) set. We manage MDD on behalf of the industry and it underpins the operation of the Supplier Volume Allocation arrangements and network charging.

MDD covers a range of information including Standard Settlement Configurations, Profile Classes and Grid Supply Point Groups.

Parties such as Suppliers use this reference data to register Meter Point Administration Numbers (MPANs), which are unique identification numbers for meters in the retail market. Line Loss Factor Classes (LLFCs) are associated with MDD. LLFCs are multipliers for scaling the amount of electricity that is consumed or generated to account for losses from the electricity distribution networks.

Ofgem's TCR will result in major changes to how network charges are set, with the distribution charge aspects being introduced from April 2022. In doing this, the numbers of LLFCs in MDD will increase significantly from circa 16,000 to an estimated 31,000. The number of valid set combinations will also increase from circa 208,000 currently to approximately 420,000.

Anticipating such a major change to MDD data, from December 2020 to March 2021 we led work to develop central system and industry testing. Overall we need to provide assurances to the Supplier Volume Allocation Group, the BSC Panel and BSC Parties that adding such a large amount of new data will not pose risks to Settlement.

We have all the DNOs' combinations approved and these will be effective from 1 April 2021. We are looking to progress the Independent Distribution Network Operators (IDNO) MDD sets. On 20 January 2021 the larger DNO MDD sets went live, which included the vast majority of the changes needed to meet Ofgem's TCR requirements. Industry testing was carried out and completed at the end of February, with central system testing due to complete by the end of March 2021. Subject to successful testing, as agreed with the Energy Networks Association (ENA) and the IDNOs, we will look to progress their combinations in line with the ENA's migration plans. This will ensure that all migrations can take place before the April 2022 deadline.



# Market-wide Half Hourly Settlement is a key step to a smarter system

Increasing numbers of innovative businesses, both new entrants and existing companies, are bringing new technology or business models to help more consumers provide DSR.

Following the P344 'Wider Access' reforms mentioned in the overview of the business plan, we have helped six independent aggregators to register for Wider Access as VLPs. During 2021 we expect to be supporting others through the simpler, and quicker market entry process which Kinnect provides.

MHHS is a once in a generation change providing the bedrock for a smarter system which promotes and rewards more consumer engagement and participation. Our Kinnect platform will support the delivery of MHHS in the future.

In 2022/23 we expect to be migrating the Supplier Volume Allocation Agent (as mentioned on the Kinnect roadmap diagram on page 14). Once migrated to our new platform, the SVAA will play an important role in MHHS by aggregating actual readings from Half Hourly Meters.

MHHS coupled with the use of smart meters, will enable a range of innovations that will benefit our customers and energy consumers. In addition, more granular information on usage through MHHS will help companies to fine tune existing products and services, or develop new ones such as the next generation of 'time-of-use' tariffs. It will also help us to deliver faster, more accurate Settlement and reduce the timescales to close out a Settlement period from 14 months to just four months. This will reduce the risk for our customers as they will know how much they are either owed, or will have to pay in Settlement charges far more quickly. It will allow them to close their own financial ledgers earlier. It will also accelerate Settlement calculations so that a company's exposure (and therefore its need to provide collateral) can be reduced.



“Elexon’s Operational Service Management is a level above other codes. Elexon’s staff have a fundamental grasp of the data and challenges faced by Suppliers and are able to provide practical support and suggestions beyond the standard regulatory body.”

Elexon customer survey 2020

# Market-wide Half Hourly Settlement is a key step to a smarter system

(Continued)

## Continuing our role in leading industry work to prepare for MHHS

We are leading two industry working groups on behalf of Ofgem which are dedicated to further developing the Design Working Group's preferred MHHS Target Operating Model (TOM). Ofgem gave its preliminary approval to the TOM in October 2019.

The Code Change and Development Group (CCDG) is identifying the changes needed to electricity codes to support MHHS. In December 2020 we published the CCDG's consultation on the detailed areas of the TOM design and the expected code impacts. We are now analysing the responses. Subsequent CCDG milestones will include a consultation in Q2 2021 on the detailed transition approach, a consultation in Q1 2022 on the specific red-lined changes to impacted codes, and a final report to Ofgem in Q2 2022.

The AWG is developing a reference architecture to support the implementation of the TOM which will set the framework for suitable data integration that is appropriate to the new MHHS services. In Q2 2021, we will publish an AWG consultation on the reference architecture before making a final recommendation to Ofgem later this year.

Both the CCDG and AWG workstreams are critical to the success of MHHS, as they will ensure that the optimal processes and architecture are put in place to support the biggest overhaul to the electricity retail market since the 1998 reforms. We are proud to have taken on this responsibility.

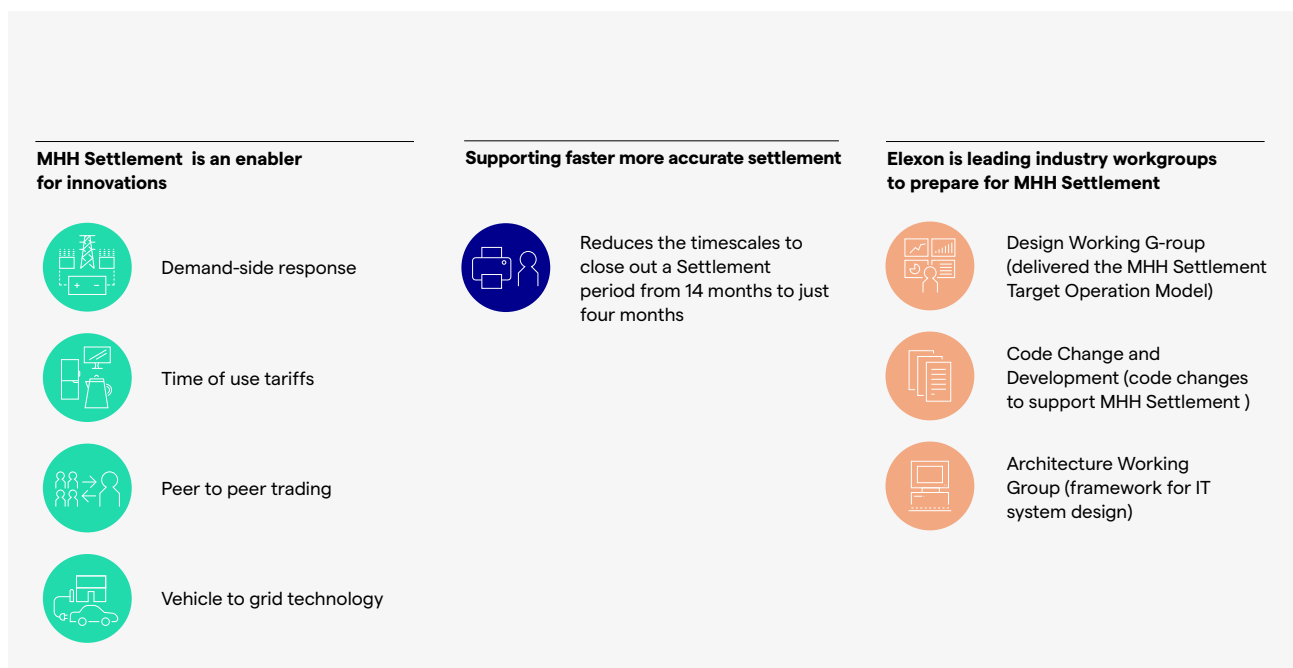
## MHHS industry wide implementation

Ofgem has identified a need for a Settlement PM for MHHS implementation and it has proposed that Elxon fulfils this role.

As mentioned in the overview, Ofgem appointed Elxon as the SRO and PM for MHHS in April 2021. Having led the design of the TOM, we believe we are the right organisation to manage delivery of MHHS. This is because we can draw on our 20 years' of experience in successfully managing Settlement arrangements and their development, our proven track record of delivering major industry reforms and our reputation for excellent customer service, with an emphasis on quality delivery.

If approved by Ofgem, Modification P413 will enable Elxon to provide the PM role. P413 is due to go to Ofgem for decision in mid-March 2021.

### Market-wide Half Hourly Settlement is a key step towards a smarter system



## Our BSC Sandbox is now available and progressing applications

MHHS is an enabler for innovation and we are pleased that we can now offer our BSC Sandbox service. Alongside MHHS and changes to the BSC, the Sandbox could play an important part in helping BSC Parties and new entrants develop new, innovative products and services.

The Sandbox allows innovators and entrepreneurs to trial their concepts in a live market environment, without having to meet all the usual BSC rules. Providing a safe space for trials is important if we are to meet the net zero challenge. We were the first code administrator to develop a service of this kind, following approval of P362 in August 2018. However, our Sandbox service has only been officially available since July 2020, following completion of Ofgem's review of their innovation support services.

We were pleased to publish the first consultation in February 2021 on an application to use the Sandbox. Emergent Energy proposes to trial proprietary technology to perform an 'on-site aggregation' calculation on private wire networks. The BSC Panel will then review the proposal and any industry feedback before making a recommendation to Ofgem. Ofgem makes the final decision on whether Sandbox trials can go ahead.

We believe that the Sandbox is a really exciting opportunity for BSC Parties and new entrants to trial their innovation proposals. Emergent Energy is one of a number of companies that have made proposals to use the Sandbox and we look forward to working with all of them to progress their plans.



## Supporting our customers in managing the impact of COVID-19

An important part of our service is to respond quickly to the needs of customers. The lockdown measures introduced in March 2020 caused a sudden reduction in demand from businesses and a significant drop in the volumes of electricity sold by Suppliers.

In the absence of meter readings, Suppliers faced Settlement costs based on historic consumption that did not reflect these lower energy volumes. They also faced scrutiny under the BSC Performance Assurance regime for securing sufficient meter reads.

We worked quickly with the BSC Panel and the Panel's Performance Assurance Board (PAB) to put in place temporary measures to ease the burden on Suppliers. The time taken from discussing the issues with industry to implementing the measures was only 10 days.

### The measures were:

- Derogations allowing Suppliers to provide estimated consumptions for use in Settlement that reflect the realities of the lockdown
- Suspending Error and Failure Resolution (EFR) targets
- Suspending the charges Suppliers would normally face if they do miss certain Settlement performance targets.

The consumption estimation derogation was due to end on 31 December 2020. However, shortly after the Government announced a second lockdown in November, the PAB concluded this derogation should continue for the foreseeable future. The derogation on Settlement performance targets is also still in force. Therefore only the requirement to meet EFR targets has resumed.

Overall, this emphasises our commitment to continue our support of industry. If there is a clear case for stepping in again to help Parties, then we will do so swiftly. We are pleased that in the results of our 2020 customer survey, there was strong recognition for our support in managing the impact of COVID-19.

# BSC RULES MANAGEMENT



# Elexon's Rules Management covers:



**01**  
Our governance of the BSC, including the support we give to the BSC Panel in delivering its strategy, and to the Panel's Committees



**02**  
Our management of the BSC rule change process via Modifications, Change Proposals and Issues



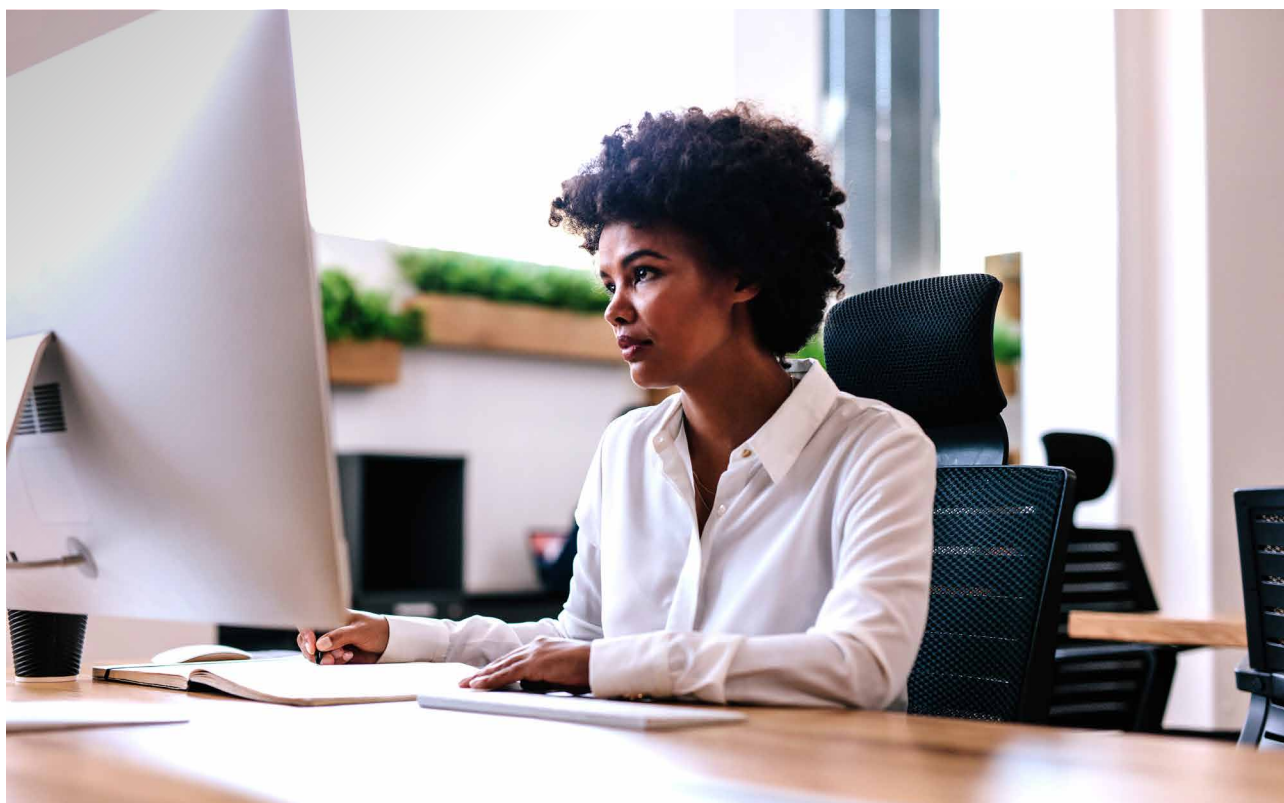
**03**  
Our plans to use technology to make the BSC and Code Subsidiary Documents more interactive, customisable and searchable



**04**  
Continuing to make the case for code consolidation and reform of central services

Helping and supporting BSC Parties and stakeholders to develop proposals to modify the BSC and then managing implementation of those changes is one of the most important contributions we can make to our customers. It also makes sure the BSC plays its part in meeting the net zero challenge.

Our priorities for BSC rules management in the coming year are to continue working on BSC changes whether they are required to meet regulatory deadlines, to open up new market opportunities for BSC Parties or to address routine changes. In the following paragraphs we describe some of these Modifications.



---

## Modifications required by major regulatory initiatives

---

### **Modification P402 'Enabling reform of residual network charging as directed by the Targeted Charging Review (TCR)'**

This change introduces new reporting requirements on Licensed Distribution System Operators (LDSOs) and Elexon to provide data to National Grid ESO in line with Ofgem's TCR reforms. We expect that this change will be implemented in the February 2022 release

### **Modifications P344 'Project TERRE' and P407 'Project MARI' (Manually Activated Reserve Initiative)**

Now that the Brexit Implementation Period has finished there is no premise in the UK and EU Trade and Cooperation Agreement (TCA) for GB's participation in TERRE or MARI.

We are working with National Grid ESO to assist with determining the next steps for Project TERRE. National Grid ESO is undertaking a cost-benefit-analysis to explore whether to implement a GB-only Replacement Reserve (RR) product, and this is due to complete late spring/early summer 2021. We have finalised our work on testing Settlement systems to support Project TERRE. This ensures that we can resume work at a later date if this is required.

Following conversations with Ofgem, 'P407 'Project MARI' and the corresponding Grid Code Modification (GC045) were withdrawn in early February to reflect that is no requirement to implement MARI in GB.

### **Modification P410 'Changing imbalance price calculations to comply with the Imbalance Settlement Harmonisation regulations'**

is also linked to the implementation of European regulations. They require a new parameter, Value of Avoided Activation of balancing energy' (VOAA), based on available actions, to be used in imbalance price calculations. Throughout 2021 we will be working to ensure that P410 can be implemented around December 2021 before the compliance deadline in January 2022.

---

## Modifications which build on progress to net zero

---

We continue to support industry with the adaptation of the BSC so it progresses towards a smarter, more flexible electricity system. Such changes are a growing area of activity for Elexon as can be seen from previous Modifications, and those Modifications still in flight. More are expected in order to achieve net zero.

**Modification P375 'Settlement of Secondary BM Units using metering at the asset'** has seen us working closely with a VLP and the industry to enable data from asset meters fitted at units behind the boundary point to be submitted into Settlement. It could have a transformative effect on the energy system by offering DSR providers and other small asset owners more opportunities to provide balancing services. The reforms would also give LDSOs more accurate control of their networks, allowing them to dispatch assets with more efficiency. There has been strong support for these reforms during the Workgroup phase. P375 was approved by Ofgem in February 2021 for implementation in June 2022.

**Modification P415 'Facilitating access to wholesale markets for flexibility dispatched by Virtual Lead Parties'** follows on from the Wider Access reforms. It would amend the BSC so that consumers offering DSR can trade this in the wholesale electricity market through a VLP, rather than through their Supplier. P415 anticipates using processes developed through the implementation of P375 to obtain and use data from asset meters. During 2021 we plan to complete the work with the Workgroup and bring the Modification to the Panel for its views. A date has not been set for implementation.

**Modification P379 'Multiple Suppliers through Meter Splitting'** proposed to change the BSC so that meters can account for two different supplies of consumption. The change was withdrawn by the proposer (GridBeyond) after independent analysis (requested by the Panel) showed that the costs for implementing it would significantly outweigh the benefits.

We would like to thank all industry parties for their dedication and insights that have supported development of the proposal. There are important learnings from the development process for P379, which we now plan to compile and publish. We hope these learnings will assist in development and proposals for future BSC changes and wider energy policy.

---

## Code consolidation and simplification

There is a clear need to consolidate the codes landscape so that it is easier to navigate for both existing and new energy companies. Without reform, the current arrangements could slow down progress to net zero as the change process for the codes is lengthy and cumbersome. Having 11 codes, managed by six administrators does not lend itself to making widespread, cross-industry changes which will be needed. However, a review of codes by Ofgem and BEIS has made limited progress so far.

Following the Energy White Paper, published in December, it is expected that the Government will consult later this year on energy code governance arrangements, and review the organisational structure for the electricity SO. Ofgem has also recommended to Government that an independent body is set up to carry out the electricity SO role. This body would be completely separate from National Grid.

Together with system operation, the energy codes form the core of central services for the energy system. We believe it is right for the future of the SO roles to be considered alongside reforms for code arrangements. In our latest [Policy View](#) we have outlined options for reforms. We believe the gas and electricity SOs could be merged, and a 'market operator' could be created as a single body to manage all energy codes. In our view, this will help progress to net zero by promoting better management of the energy system.

---

## Making it easier for customers to interact with the BSC

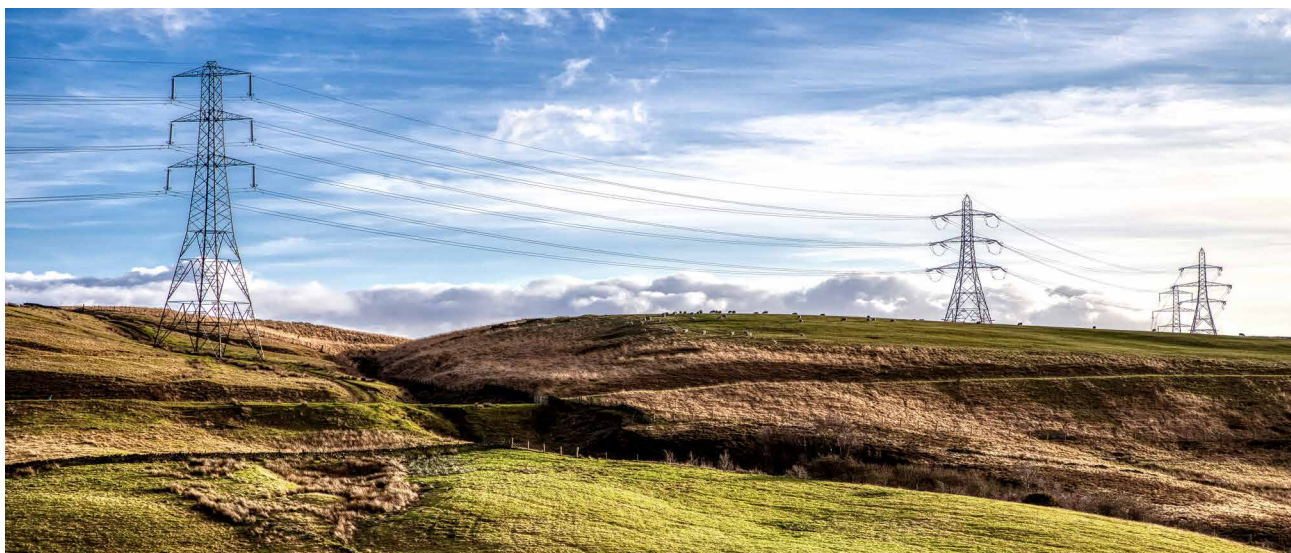
Until reforms for the code arrangements are in place, our goal is to speed up the BSC change process and make it as easy as possible for our customers to interact with the BSC and understand how the rules impact on them. Typically it takes eight months for a BSC Modification to be developed and sent to Ofgem for a decision. We generally schedule approved changes into three system 'releases' per year so that they are implemented in a co-ordinated way. To make better use of resources by Elexon, the industry and Ofgem, we want to reduce incidences where industry develops BSC changes which are not then approved by Ofgem.

Ofgem's current practice is to wait until it receives a recommendation from a code panel on a Modification before deciding whether to approve it. It would be better if Ofgem was able to make its views known earlier in the process.

We are looking to establish a cross electricity sector change group to strategically review and manage change to industry systems, so that there is more detailed forward planning of Modifications and the changes necessary to enact Significant Code Review reforms.

**"Elexon are supportive, professional and are experts within their relevant fields."**

Elexon customer survey 2020





---

## Digitising the BSC

---

We recognise that the BSC and its subsidiary documents are complex. That is why each of its sections are supported with a simple guide and we also provide numerous guidance notes to further aid our customers. We have been working to digitise the BSC documents so that they are more accessible. During 2020 we investigated technology options and explored our customers' needs. In 2021 we plan to deliver our first version of the digitised code and to work closely with stakeholders to ensure they are seeing the full benefit.

This will be achieved in phases, focusing on elements that will deliver the most value first. By making best use of this technology we will help our customers to 'self-serve' and get quicker answers to their questions. It will also reduce the amount of time our colleagues spend on updating code rules manually, increasing our efficiency and ability to implement change more quickly.

“Our monthly Operational Support Manager (OSM) meeting has been discursive in nature and we are confident that the feedback from our experience is being collated for consideration at expert groups and at the Performance Assurance Board (PAB).”

Elexon customer survey 2020



# ASSURANCE



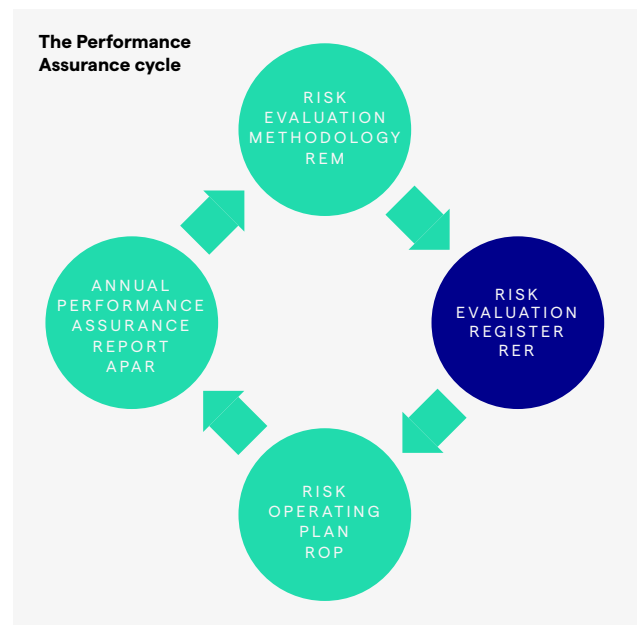
# Assurance

**A distinguishing feature of the BSC and Elexon's services is the extent of our assurance activity. The work we do to provide assurance on the robustness and accuracy of Settlement is encompassed within our Assurance product, which we provide to our customers and the market. Elexon assurance services aim to efficiently manage and mitigate the risks associated with Settlement. This is captured in the Performance Assurance Framework (PAF) which is made up of a number of techniques, that work holistically to manage all aspects of risk across all the participants in the market, and pivot to respond to changes in industry and the wider economy.**

Changes to the Performance Assurance Reporting and Monitoring System (PARMS) and other data collection systems aim to improve analytic abilities and techniques. They also seek to avoid risks becoming issues in the future and ensure that industry Parties' time and effort is spent in the most effective way possible. In addition, the assurance team has fed into all aspects of changes occurring in wider industry, such as the move to smart metering and MHHS.

2020 has shown the Elexon PAF to be flexible and agile in the face of challenge and change. COVID-19 restrictions across the country caused significant disruption to the ability to read and service meters, as well as once in a lifetime shifts in usage and consumer demand. Elexon recognised the significant impact that the lockdown would have on Suppliers and therefore quickly convened a group of experts to determine how Settlement procedures could be adapted to provide the flexibility needed to allow Suppliers to focus their workforce and efforts in aiding the customers.

**"Elexon's expertise in the BSC is widely recognised by the industry and I can rely on them providing valuable advice when needed. From my interaction with the Change team, they have been outstanding when helping the industry develop the mod proposals and facilitate the right level of discussion."**



The Performance Assurance Board and Panel approved the proposals and introduced arrangements which could remain flexible and could be switched on and off to cater for subsequent lockdowns. These arrangements were explained earlier in the document.

By managing the risk effectively and efficiently we ensure that Settlement calculations are accurate and that data and meter readings used in the calculations are robust and timely. We deliver this by managing Settlement Risks. This risk-based approach allows us to deploy the right performance assurance procedures and techniques at the right time. We focus on providing the right level of assurance to all industry participants, whilst being mindful of Parties' and industry's resources in balancing requirements.

The refreshed PAF comprises 34 Settlement Risks managed by a suite of performance assurance techniques. The framework allows the Performance Assurance Board, a sub committee of the BSC Panel, to target specific issues and risks, which are most important in maintaining Settlement accuracy. Its flexible nature also enables better management of the cost to run the PAF arrangements and the cost to industry in interfacing with it. As the marketplace continues to evolve. The way in which the risks are structured allows us to ensure that we are focusing the efforts of both Elexon and the industry on the most crucial areas each year.

# CUSTOMER ENGAGEMENT



---

# Customer Engagement

---

**Elexon offers an 'end-to-end' management service for the BSC. As well as managing Settlement accurately 24/7, we help companies enter the market, support them once they are active in it, and help them exit the market if they need to. We also manage the BSC rule change process and compliance with the rules.**

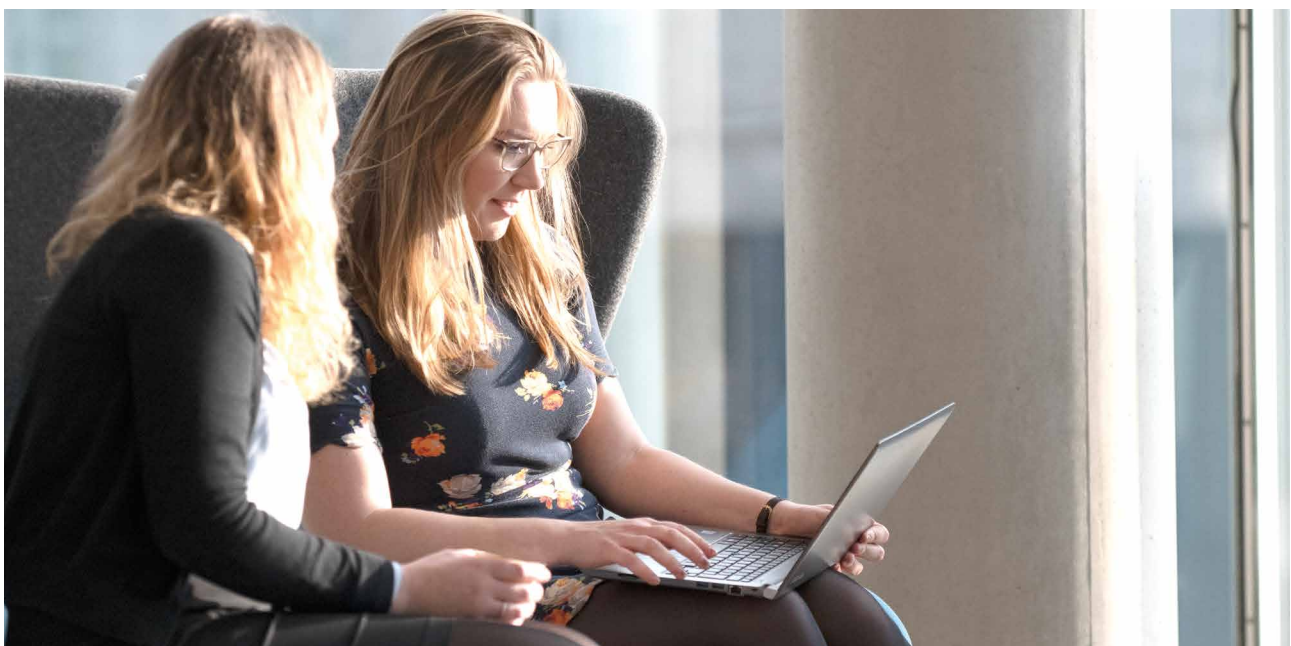
Having this 'end-to-end' oversight gives us the depth of knowledge and expertise to help industry, the Government and Ofgem develop the solutions and new arrangements that are essential if we are to achieve net zero.

Our new structure is built on Elexon being a customer centric organisation. Under it, customer service is encompassed in all that we provide and the way in which we deliver it.

To deliver the end-to-end service we want to continually improve our relationship with customers and our understanding of their needs and the issues they face. We came top of Ofgem's 2019 energy code administrators' performance survey for the third year in a row, with 86% of respondents saying they are satisfied with our performance. The survey was carried out for Ofgem between May and August 2019 by independent researchers, based on feedback from more than 200 industry stakeholders.

Due to COVID-19, Ofgem did not conduct the energy code administrators' performance survey for 2020. However, we have not let our standards slip. Every year we conduct our own survey of customer satisfaction using an independent consultancy to contact our customers and in 2020, despite having to work remotely we are delighted with the results which showed high customer satisfaction scores, particularly relating to the change process and our communications. The survey also showed our customers' very positive reaction to our COVID-19 response and changes made to performance assurance.

To help us deliver an improved service for customers in the coming years, we are trialling the use of a customer relationship management (CRM) system internally. We are doing this to evaluate whether the system would help to further improve our engagement with, and understanding of, our customers and their needs.



---

# Customer Engagement

(Continued)

---

## New corporate website and improvements to [www.elexon.co.uk](http://www.elexon.co.uk)

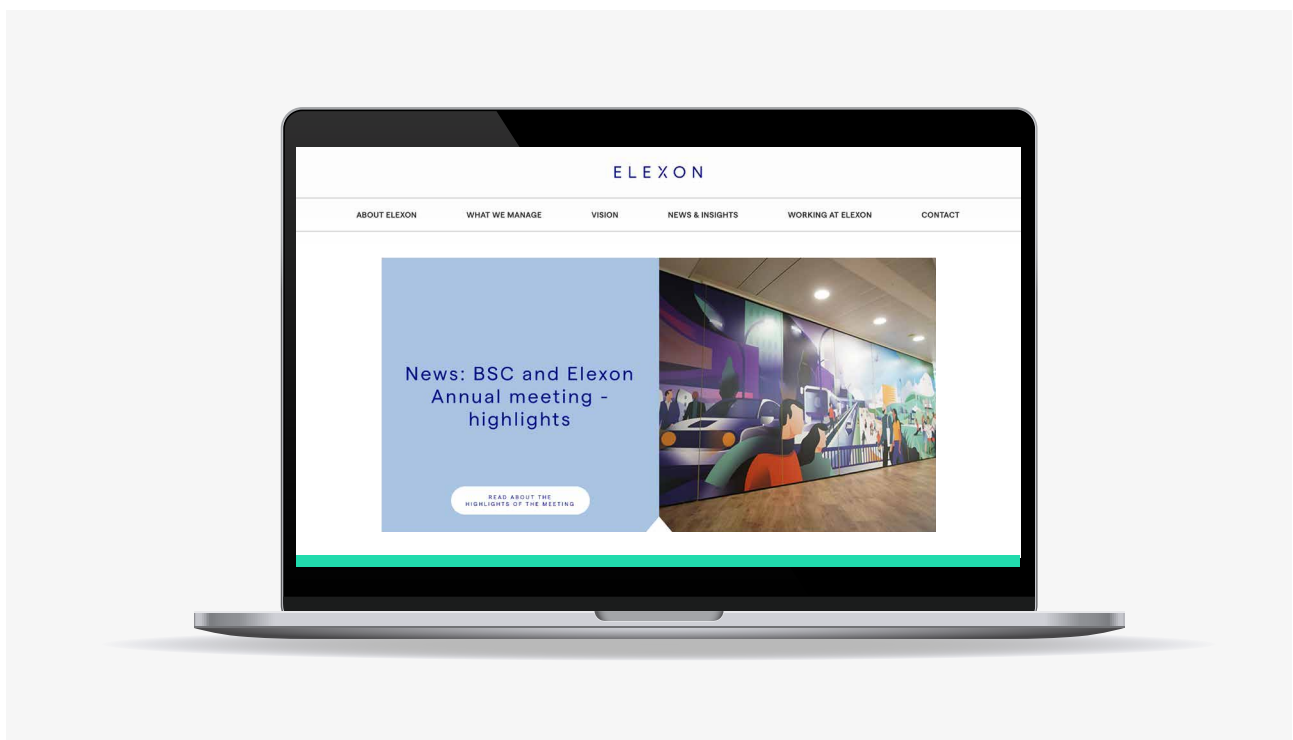
In September 2020 we launched a new website [www.elexon.com](http://www.elexon.com) to demonstrate what Elexon can offer the wider electricity and energy industry, over and above the day-to-day running of the BSC. We also overhauled [www.elexon.co.uk](http://www.elexon.co.uk) so that this site's content concentrates on the BSC such as the change process, BSC operations and Settlement. Meanwhile we continue to publish Settlement data and industry information on the Elexon Portal and on the BMRS.

On [www.elexon.com](http://www.elexon.com) you can find more high level information about Elexon's role in the market, how we work, our governance arrangements and our senior leadership team. We also provide information on what Elexon is like as a place to work, together with links to our corporate reports and policy views.

We have introduced more functionality to [www.elexon.co.uk](http://www.elexon.co.uk). Users now have the option to switch on our new glossary function for key pages on our website to quickly understand a term on a page by hovering over an underlined word. Customers can still click through to the respective glossary pages if required. This is the first phase of work to make the glossary a much more effective tool for customers.

Following feedback from our customers and stakeholders, we have introduced 'plain English' explanations as we recognise that many of the formal definitions use very legalistic or technical descriptions. This also helps us to meet our commitments as members of the Plain English campaign.

We have also made enhancements to the site-search facility and will continue to introduce improvements to the BSC website during 2021/2022, responding to feedback from our customers and stakeholders. We were pleased that the improvements were recognised by our customers in our 2020 annual customer survey. The improvements to our website and other communication channels saw higher satisfaction scores and positive comments.



# Customer Engagement

(Continued)

## Voice of the Customer

We are enhancing our response to customer feedback and continuing to look at how we can better deliver our services to meet customer needs.

Our focus will be to follow up on requests made by our customers, investigate the viability of the request and implement improvements to our services. We are also keen to involve our customers in seeing how our products could be enhanced. We will set up workshops, user groups and feedback mechanisms to obtain customer views on this.

In essence the Voice of the Customer approach will make sure that we have a more consistent, detailed and methodical response to customer feedback.

## Operational Support Managers (OSMs)

Our customers have always been positive about our OSM service, where each BSC Party has a dedicated Elexon colleague who works with them to resolve issues, manage Settlement performance, engage in the change process and generally assist our customers.

We are looking to further boost that capability and promote a greater understanding within our OSMs of their customers' businesses and the challenges they face. In this way we expect this relationship and cooperation to strengthen for the benefit of our customers and Elexon.

### How much value our customers place on key aspects of Elexon's service (Elexon Customer Survey 2020)

● A lot of value    ● Some value  
● No value       ● Not relevant to me

#### 01 The quality of service



**Change vs 2019**  
(% a lot of value)

+2%

#### 02 Being adaptable



**Change vs 2019**  
(% a lot of value)

+16%

#### 03 Keeping costs to a minimum



**Change vs 2019**  
(% a lot of value)

+2%

---

# Continuing to deliver leading customer service through our People Strategy

---

**We depend on the expertise, dedication and knowledge of all Elexon colleagues to continue our high standards of customer service. In our annual satisfaction survey our customers continually tell us how much they value our expertise and personnel. As the energy system changes, so too will the needs of our customers, which is why we were pleased to recruit a Chief People Officer, Geraldine Buckland, to our Executive team earlier in 2020. She has been leading the development of our people strategy for 2020 to 2025.**

Our people strategy aims to retain and attract colleagues so that we can maintain our high customer service standards and deliver the products that you have read about in our business plan, over the next and in subsequent years. As our customers are aware, we provide more than rules administration and rule change services, we are also responsible for the underlying systems that deliver those rules and the changes to those systems to enable market development and innovation. That means that as well as requiring talented people with energy and markets expertise, we also need individuals with technology experience and delivery capability, both of which are in high demand despite the current economic uncertainties.

Our vision is to create the leading provider of essential market services to the GB energy sector by 2025, for the benefit of market participants and their customers. Our people strategy therefore sets the direction for ensuring that all Elexon colleagues are geared up to help us deliver that vision and meet the challenges of the future energy system.

**“Very good industry awareness and knowledge and good understanding of the role within the energy market. They have a good grasp of the industry.”**

Elexon customer survey 2020

---

## Supporting diversity and the well-being of our staff

We want Elexon to be a great place to work for all of our colleagues and we are committed to supporting diversity and equal opportunities across the organisation.

We have set up a diversity and inclusion forum where Elexon colleagues volunteer their time to discuss, agree and put into practice changes to our ways of working to further inclusion, equality and diversity. This includes training on understanding unconscious bias and reviewing the accessibility of employment in Elexon (including for people with visible and non-visible disabilities).

We have a strong focus on the well-being of all of our colleagues. During 2021 we will continue to promote advice from the Mental Health Foundation (one of the two charities our staff have chosen to raise money for between January 2020 and January 2021). We have also trained a number of volunteers from across each of the directorates, including two of the Executive team, to become Mental Health First aiders to help members of staff who may need support. We viewed this initiative as ever more important with the challenges of COVID-19 restrictions and the impact on staff wellbeing. During 2021/22 we aim to sign up to the [Mental Health at Work Commitments](#).

The Elexon logo is displayed in a light grey rectangular box. The word "ELEXON" is written in a sans-serif font, with each letter in a different color: E (yellow), L (orange), E (light blue), X (green), O (dark blue), and N (purple).



# OUR EUROPEAN FACING WORK



---

## Our European facing work

---

**Although the United Kingdom left the European Union on 31 January 2020, we continue to remain subject to EU legislation until the end of the transition period on 31 December 2020.**

As a result of the Brexit Trade and Cooperation Agreement (TCA) we remain aligned with the EU Internal Energy Market (IEM). While almost all responsibilities lie with National Grid ESO, we remain a nominated Designated Operator and as such will work closely with National Grid ESO to jointly implement change.

Although the UK Government does not have an active role in the EU's organisations, it is able to make its views known via the joint committees as well as diplomatic lobbying. We continue to look for opportunities to support BEIS in this and provide expert advice wherever and as much as possible. Similarly, we remain members of Europex and via this organisation and its influential lobbying, we are able to make our views known and influence decision-making.

It is worth noting that the present EU Commission is only a little over 18 months old. It has set-out its priorities for implementation of a European Green Deal, revisions to the European-wide transmission network; integration of all energy systems; a network code on cyber security; and the creation of a North-Sea network.

Over the next 12-18 months we will start to see details of how the Commission will implement the necessary changes. So while the last 12 months have been relatively quiet compared to previous years, and has essentially just seen consolidation, we should expect to see a lot more output from the Commission and its associated bodies such as the Agency for the Cooperation of Energy Regulators (ACER) and the European Network of Transmission System Operators for Electricity (ENTSO-E).

Now that the Brexit Implementation Period has finished the relationship between the UK Government and the EU continues to evolve. We are liaising with BEIS and Ofgem to support them where we can on aligning markets and policy, particularly regarding working towards carbon neutrality.

This means that we are therefore able to horizon-scan for any potential changes that may impact the operation of the BSC. While there is very little alignment on Balancing or Settlement within the TCA, there are agreements to work together in areas that could affect the BSC, for example development of the North Sea Grid. Since the end of the Brexit Implementation Period, BMRS has been designated as the reporting platform for GB. We are working with Ofgem to explore how market monitoring and inside information reporting may change to meet the changing needs of the GB market, while maintaining liaison with the EU as per the TCA.



# ELECTRICITY MARKET REFORM



# Electricity Market Reform

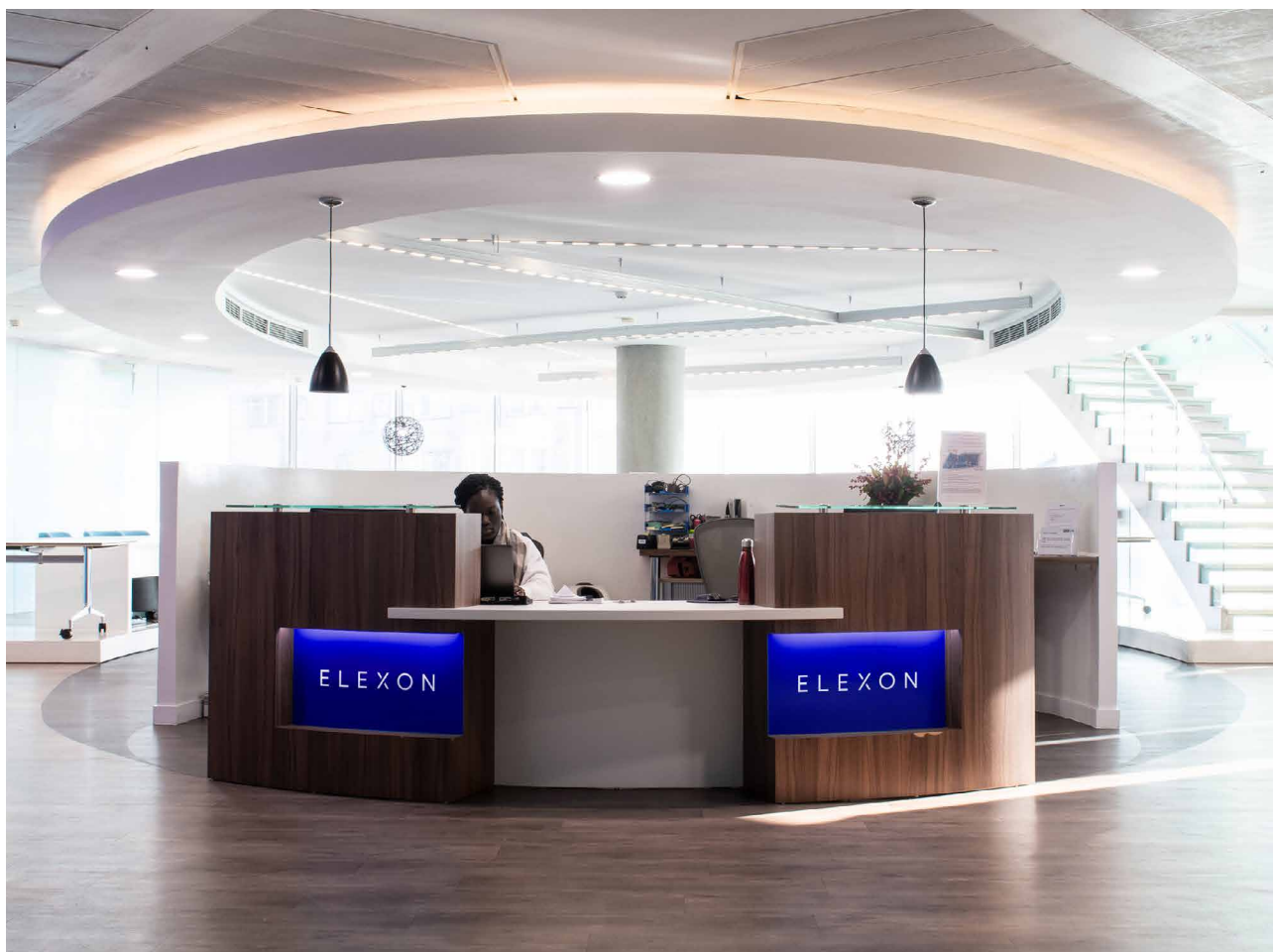
**BSC Parties will be aware that EMR Settlement Ltd (EMRS), Elexon's wholly owned subsidiary, is the Settlement Services Provider to the Low Carbon Contracts Company (LCCC) and the Electricity Settlements Company (ESC), calculating, collecting and distributing payments for both the Capacity Market (CM) and Contracts for Difference (CfD) schemes.**

The separation between Elexon and EMRS ensures risks and liabilities from EMR Settlement activities cannot affect Elexon. While some of our people are full-time on this EMR activity, other industry experts from Elexon support EMR Settlement activities part-time, but regardless, all record their time to ensure their cost is allocated appropriately to BSC or EMR activities. This also enables us to allocate a proportionate share of the Elexon overheads such as office costs etc.

Nearly £4.7m of such overheads have been borne by EMRS since 2015, meaning that without the EMR activities, BSC Parties would have had to bear an additional £4.7m over that period.

Following a detailed review of the EMRS contract in 2019 by LCCC and ESC, EMRS was successfully given the 'green light' to continue its Settlement operations until 2026.

Given the similarities between EMR and Elexon key offerings, best practice is shared and we will continue to do so across these products to further realise efficiencies and synergies for the benefit of both the EMR and Elexon customers.



# BUDGET FOR 2021/22



# Overview of 2021/22 Budget

**This part of the business plan details the budgeted costs for 2021/22 in support of our strategy as laid out earlier in this document.**

Our annual budget reflects the cost of the resources we need to carry out our work in 2021/22. The key elements of our budget are:

#### Regular Activity:

- Our operating costs (to continue delivering our BSC obligations), the largest element of which is our people and associated overheads, and
- Our contracted expenditure of operating and maintaining outsourced services in relation to the BSC Systems and BSC Agents.

#### Projects and Investment Activity:

- The teleswitching service which is a pass through from Distribution Network Operators (DNOs) and which was an additional obligation introduced last year
- The expenditure associated with Change Proposals or Modifications raised by the industry, including BSC Systems Releases, impact assessments, consultancy and legal advice on Modifications and Change Proposals, which we refer to as 'Demand Led' because it is to deliver industry-led change
- The investment in the development of Elexon Kinnect as part of our digitalisation programme, and associated consequential business costs of its delivery, and
- Horizon-scanning market development activity, to ensure that we are prepared for future changes that may impact the BSC and BSC Parties.

Elexon is a not for profit entity, funded by electricity market participants. We do not carry any reserves or retain capital. Any underspend against budget is always returned to BSC Parties, meaning that we return money if we make savings or it transpires it is not required. In light of this, budgeting for uncertainties in advance of any new financial year, with no other access to working capital, requires careful consideration. We need to address contingencies mindful of this constraint, while also endeavouring to set challenging financial and efficiency targets for the business, which ensure we deliver the best possible value for money to the industry.

**Table 1.1 Budget for Total Regular BSC Activity**

| Item                              | Year to March 2020/21 Budget £m | Year to March 2020/21 Forecast £m | Year to March 2021/22 Budget £m | Variance to March 2020/21 Budget £m | Variance to March 2020/21 Budget % | Year to March 2022/23 Projection £m | Year to March 2023/24 Projection £m |
|-----------------------------------|---------------------------------|-----------------------------------|---------------------------------|-------------------------------------|------------------------------------|-------------------------------------|-------------------------------------|
| Elexon Operational                | 20.9                            | 20.3                              | 21.3                            | (0.4)                               | (2)                                | 21.5                                | 21.9                                |
| Contracted                        | 18.6                            | 17.8                              | 19.0                            | (0.4)                               | (2.0)                              | 19.4                                | 20.0                                |
| <b>Total BSC Regular Activity</b> | <b>39.5</b>                     | <b>38.1</b>                       | <b>40.3</b>                     | <b>(0.8)</b>                        | <b>(2.0)</b>                       | <b>40.9</b>                         | <b>41.9</b>                         |

# Overview of 2021/22 Budget

(Continued)

The budget for total regular Elexon BSC activity shows an increase of £0.8m (2.0%) against the budget for 2020/21. In real money terms, after taking into account indexation and inflation, our regular activity shows a decrease of £0.4m (1.0%) against the 2020/21 budget. Despite doing more than in previous years, we strive to reduce the cost of our regular activity through efficiency improvements.

**Table 1.2 Budget for Projects and Investments**

| Item  | Year to March 2020/21 Budget £m | Year to March 2020/21 Forecast £m | Year to March 2021/22 Budget £m | Variance to March 2020/21 Budget £m | Variance to March 2020/21 Budget % | Year to March 2022/23 Projection £m | Year to March 2023/24 Projection £m |
|---|---------------------------------|-----------------------------------|---------------------------------|-------------------------------------|------------------------------------|-------------------------------------|-------------------------------------|
| Teleswitch (pass through from DNOs)             | 1.5                             | 1.4                               | 1.8                             | (0.3)                               | (20.1)                             | 1.9                                 | 0.1                                 |
| Demand Led (to deliver industry led change)     | 4.2                             | 4.2                               | 6.5                             | (2.3)                               | (55.3)                             | 4.7                                 | 4.7                                 |
| Investment in Systems & Business Transformation | 10.1                            | 10.1                              | 20.0                            | (9.9)                               | (97.6)                             | 15.0                                | 15.0                                |
| Market development                              | 0.5                             | 0.5                               | 0.5                             | -                                   | -                                  | 0.5                                 | 0.5                                 |
| <b>Total Projects and Investments</b>           | <b>16.3</b>                     | <b>16.2</b>                       | <b>28.8</b>                     | <b>(12.5)</b>                       | <b>(76.6)</b>                      | <b>22.1</b>                         | <b>20.3</b>                         |

Our central systems need to be modernised to deliver market requirements and support progress to net zero. The increase anticipated in the coming year compared to the forecast is mainly driven by the need for us to invest in delivering Elexon Kinnect (as described in more detail earlier in the business plan) ahead of progressing significant industry-driven change such as MHHS.

Over the next few years we are committed to procuring, transforming and transitioning the current ageing BSC Central Systems to Kinnect. Kinnect's cloud-based technology will be easier to adapt and maintain. It will also mitigate the risks of failure and deliver better value and service to BSC Parties, whilst providing greater flexibility. Investment of £10m allocated to deliver some of the Kinnect components in prior business plans.

(2018/19 and 2019/20) has been returned, as industry changes such as Project TERRE have rightly been prioritised over our plans to deliver Kinnect. However, 2021/22 is a pivotal year for progressing major systems' investment. There is a window of opportunity to make significant progress on delivering our new platform to support anticipated evolution of the energy system in coming years. Investment in industry-led changes, known as Demand Led, is also increasing due to the number of changes that are to be implemented in the period.

# Overview of 2021/22 Budget

(Continued)

A significant proportion of our costs for delivering the BSC arrangements relate to our contracted expenditure on the BSC Agents which provide the existing Settlement calculation systems and services. These current outsourced contracts are scheduled to end in March 2022. This requires us to retender for central services contracts in 2021/22, and to enter into transition, all of which is included in our projects and investment spending total for 2021/22.

**Table 1.3  
Budget Summary**

| Item  | Year to<br>March<br>2020/21<br>Budget<br>£m | Year to<br>March<br>2020/21<br>Forecast<br>£m | Year to<br>March<br>2021/22<br>Budget<br>£m | Variance<br>to March<br>2020/21<br>Budget<br>£m | Variance<br>to March<br>2020/21<br>Budget<br>% | Year to<br>March<br>2022/23<br>Projection<br>£m | Year to<br>March<br>2023/24<br>Projection<br>£m |
|---|---|---|---|---|--|---|---|
| Total BSC Regular Activity  | 39.5  | 38.1  | 40.3  | -0.8  | -2.0   | 40.9  | 41.9  |
| Total Projects and<br>Investments   | 16.3  | 16.2  | 28.8  | -12.5   | -76.7  | 22.1  | 20.3  |
| Total MHHS  | 0   | 0   | 14.6  | -14.6   |  |   |   |
| <b>Total Elexon</b>   | 55.8  | 54.3  | 83.7  | -27.9   | -50.0  | 63  | 62.2  |
| <b>Overheads and Other<br/>operational costs incl<br/>15% Contingency</b> | <b>854,916</b>                              | <b>600,616</b>                                |   | <b>562,942</b>                                  | <b>562,942</b>                                 |   | cccc  |



# Overview of 2021/22 Budget

(Continued)

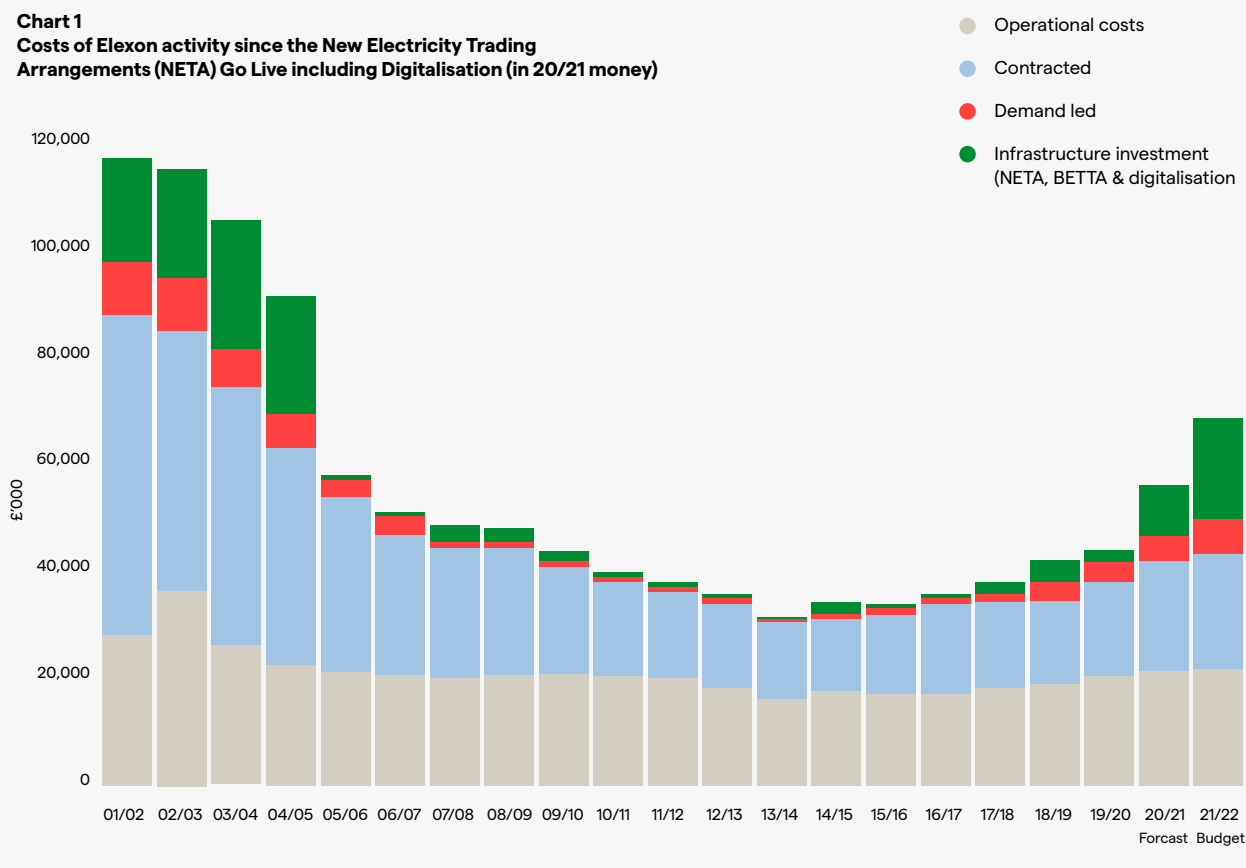
The budget to deliver BSC activity in 2021/22, including the detailed breakdown of work streams described in this business plan, is £69.1m. This represents an increase of £13.3m (23.8%) against the current year's budget which as explained above is principally attributable to the increase in industry-led change and the investment in our digitalisation programme. We believe that this budget sets our costs at a level which is appropriately challenging for the year ahead, while recognising the operational and financial pressures faced by our customers in these difficult times.

2021/22 will be the seventh year that Elexon's subsidiary, EMRS, delivers its services to LCCC and ESC. All EMR related costs are fully funded by LCCC and ESC and the total costs of LCCC and ESC (which include those of EMRS) are consulted on separately by BEIS. Our delivery of these services also enables us to offset some of our overheads which would otherwise have been borne by BSC Parties (2019/20: £839k) and is budgeted to be £1.0m for 2021/22.

Chart 1 below details the total costs of Elexon activity since NETA go-live in 2001/02 in real terms (in 2020/21 money after applying April RPI of each year). The costs are net of staff and overhead costs for EMR activities (which are fully funded by LCCC/ESC). It shows the infrastructure investment in the early years for NETA go-live and subsequent expansion to Scotland, then the reduced investment, as BSC Parties benefitted from sweating of those assets, as we successfully brought the costs down though efficiency savings and competitive procurements. More recently, these costs have begun to rise, reflecting the growth in system investments and digitalisation costs caused by Demand Led activity (to deliver industry-led change) and our investment in future proofing our central systems.

*The following pages describe each element of our budget in more detail.*

**Chart 1**  
**Costs of Elexon activity since the New Electricity Trading Arrangements (NETA) Go Live including Digitalisation (in 20/21 money)**



# BSC Regular Activity

## Elexon Operational

The budget for our operational costs for 2021/22 is £21.3m, as shown in Table 1.1. This includes costs such as people, occupancy, staff related and administrative expenses, as well as consultancy and legal support. This also includes the offset generated by the contribution from EMR activities.

The 2021/22 regular activity headcount as illustrated in Table 2, remains broadly consistent with the 2020/21 budget, with an increase of only a 2.3 full time equivalents (FTE).

We have budgeted based on known headcount by function and have made a conscious decision not to materially increase headcount this year compared to last year's budget. Full consideration is taken of indexation as well as conditions and trends in our sector, and the wider economy whilst preparing this budget.

Over the past year we have sought to transform the organisation, to ensure that it is fit for purpose and best positioned to deliver on our mission and vision, by focusing on the products that we deliver for our customers. This is explained earlier in this business plan.

## Contracted

A significant proportion of our costs of delivering the BSC arrangements comes from contracted expenditure for the BSC Agents and contracted service providers for running legacy systems parallel to the new technology platforms until such time as we can retire these legacy systems. These are predominantly fixed costs, linked to indexation.

The key driver of our £0.4m (2.0%) increase to £19.0m is mainly due to charges imposed to use the industry's Data Transfer Network (DTN) for DTS messaging volumes, the cost of which is outside of our control and is fully passed through from Electralink.

**Table 2**  
Elexon Average Headcount for BSC

| Headcount | Year to March 2020/21 Budget (FTEs) | Fcast End March 2021 (FTEs) | Year to March 2021/22 Budget (FTEs) | Variance to March 2020/21 Budget (FTEs) | Variance to March 2020/21 Budget (%) | Year to March 2022/23 Projection £'000 | Year to March 2023/24 Projection £'000 |
|-----------|-------------------------------------|-----------------------------|-------------------------------------|---|--------------------------------------|--|--|
| BSC BAU   | 175.0                               | 175.6                       | 177.3                               | (2.3)                                   | (1.3)                                | 177.3                                  | 177.3                                  |

# Projects and Investments

## Teleswitch (pass through from Distribution Network Operators)

Following industry agreement in 2019, the Radio Teleswitch Service operational costs borne by the ENA have been recovered through the BSC since April 2020. This arrangement has an impact of £1.8m in the 2021/22 budget, however the costs are outside of Elexon's control and will be a fully recoverable pass through cost from the ENA. We are informed the increase of £0.3m (20.1%) compared to current budget of £1.5m is due to a hardware upgrade needed to maintain the ageing RTS infrastructure through to March 2023.

## Demand Led (to deliver industry led change)

To ensure that we are appropriately funded to implement changes requested by industry through BSC modifications, our budget includes provision for the cost of demand driven activity. This is activity arising from changes proposed by industry and required by the Government, EU and regulator.

The Demand Led budget for BSC systems releases has been set at £6.5m. This is an increase of £2.3m on the previous year's budget. The budget incorporates scheduled BSC changes, notably Behind the Meter, Enabling reform of residual network charging Methodology to set Physical Notifications and a number of other approved BSC changes and Ofgem led Significant Code Reviews. The budgeted figures are based on the impact assessments of known Modifications, taking into account estimates of historic change costs, as well as taking a view on new changes that may come forward during the year, but that have yet to be fully scoped.



## Investment in System Strategy and Business Transformation

This area of our budget relates entirely to the transformation and transition (Digitalisation Programme) of the current BSC Central Systems to Elexon Kinnect, as explained earlier in the plan. A provision is included for project resources within this budget.

In 2021/22 we will be continuing the migration plans for the Settlement Solution which will perform our data and calculations responsibilities, in line with our technology route map. We will be releasing new solutions from our Customer Solution product to reduce and remove cumbersome form filling. Finally we will begin work to migrate BMRS to the Elexon Kinnect platform, which will receive, publish and process accessible data for the industry. As a cloud-based service, Elexon Kinnect will leverage storage and processing capabilities at scale. One of the key benefits of this in the future will be that customers can 'self-serve' data requests and perform ad-hoc analysis, making the insights more valuable and customisable. This is explained in more detail earlier in this business plan.

As we stated in last year's business plan we have adopted a phased approach to delivering the Digitalisation Programme, to minimise the overall cost and risk to Parties. For 2021/22 we have included a budget of £20.0m.

## Market Development

The budget for Market Development of £0.5m enables us to horizon scan for any impending changes within the GB energy market that may impact the BSC, and is unchanged from 2020/21.

We expect there to be a number of industry developments that require Elexon to continue to monitor, engage and informally assess impacts outside of the formal change process. This is particularly the case with the Government's target of achieving net zero and in considering what the energy market can do to facilitate and aid that goal.

In addition we have set out some of the initiatives that we have already been working on earlier in this document. We continue to engage with BSC Parties and potential new market entrants to ensure the BSC enables their innovative ideas and ambitions.

# Charging Analysis

**This section outlines how we expect to charge the budget to BSC Trading Parties. Table 3 contains charging proposals from Section D of the BSC. All of the charges presented in Table 4 exclude value added tax (VAT).**

The BSC Panel endorsed a review of Section D Charges to ensure that they are appropriately set and fit for purpose. It instructed Elexon to engage an Issue Group in assessing what behaviours are driving the costs, whether the current charging structure is fit for purpose and, if not, what alternative approach BSC Parties would prefer. The Panel considered the Issue Group findings and determined the charging regime is fit for purpose, reflective of the BSC Parties' activities and fair to existing and new market participants.

**Table 3**  
**Section D – Charging \***

- |  |  |
|--|--|
| <ul style="list-style-type: none"> <li>• £500 Application Fee;</li> <li>• Membership fee of £250 per month;</li> <li>• CVA Metering System Monthly Charge of £50 per month.</li> <li>• CVA BM Unit Monthly Charge (other than for Supplier BM Unit) of £0 per month (this charge is levied on each pair of BM units in the case of an exempt generator);</li> <li>• For communication line and TIBCO charges, please refer to the Elexon website</li> <li>• Notified Volume Charge per Gross Contract MWh at a rate of £0.0005/MWh;</li> </ul> | <ul style="list-style-type: none"> <li>• For all Base SVA BM Units a charge of £0 per month;</li> <li>• For all Additional SVA BM Units a charge of £60 per month;</li> <li>• SVA costs split:               <ul style="list-style-type: none"> <li>o 50 percent of costs are paid by generators on the basis of metered energy volumes;</li> <li>o A fixed fee of £0.00925 per SVA Metering System per month;</li> </ul> </li> <li>• All remaining costs split on the basis of metered energy volumes.</li> </ul> |
|--|--|

\* These are based on the current charges. They are subject to change following a periodic review approved by the Panel. Please refer to the BSC website for current rates.

Based on the information in Table 3 examples of charges to BSC Parties are provided. First, the 2021/22 Annual Budget is set out in Table 4 below.

**Table 4**  
**2021/22 Annual Budget**

| Assumed Split of Costs |                |                  |                |
|------------------------|----------------|------------------|----------------|
|                        | 2020/21 Budget | 2020/21 forecast | 2021/22 Budget |
| SVA Costs              | 6.8            | 6.7              | 7.0            |
| Other Costs            | 49.0           | 47.6             | 62.1           |
| Total                  | 55.8           | 54.3             | 69.1           |

# Charging Analysis

(Continued)

Second, various assumptions about the size of the market are made. These are presented in Table 5.

**Table 5**  
**Market Assumptions**

| Market Assumptions                          | 2020/21 Budget | 2020/21 forecast | 2021/22 Budget |
|---|----------------|------------------|----------------|
| Number of Trading Parties                   | 440            | 451              | 490            |
| Sales - Notified Contract Volumes (TWh)     | 780            | 784              | 800            |
| Purchases - Notified Contract Volumes (TWh) | 780            | 784              | 800            |
| Generation (TWh)                            | 242            | 260              | 272            |
| Supply (TWh)                                | 237            | 260              | 265            |
| NHH Supply (TWh)                            | 107            | 117              | 119            |
| HH Supply (TWh)                             | 130            | 143              | 146            |
| CVA BM Units                                | 840            | 841              | 850            |
| SVA Base BM Units                           | 225            | 225              | 230            |
| SVA Additional BM Units                     | 185            | 271              | 340            |
| Data Line                                   | 63             | 53               | 53             |
| Comms Software (5 users)                    | 29             | 29               | 29             |
| Comms Software (additional user)            |                |                  |                |
| CVA Metering Systems (MSIDs)                | 925            | 924              | 930            |
| SVA Metering Systems (MSIDs)                | 31,785,166     | 31,368,999       | 31,525,844     |

# Charging Analysis

(Continued)

Third, the charging regime from Section D of the BSC in Table 3 is then applied to costs in Table 4 based on the assumptions in Table 5. This gives the estimated charges (either specified charges or £/MWh fees) as shown in Table 6.

**Table 6**  
**Expected Charges**

| Charge Item  | 2020/21 Budget | 2020/21 Forecast | 2021/22 Budget |
|--|----------------|------------------|----------------|
| <b>Specified Charges</b>                           |                |                  |                |
| CVA BM Units (£/month)                             | -              | -                | -              |
| SVA Base BM Units (£/month)                        | -              | -                | -              |
| SVA Additional BM Units (£/month)                  | 60             | 60               | 60             |
| Data Line - estimated average (£/month)            | 700            | 700              | 700            |
| Comms Software - average quad2 processor (£/month) | 1,080          | 1,080            | 1,080          |
| Comms Software {additional user} (£/month)         | 22             | 22               | 22             |
| Contract Traded (£/MWh)                            | 0.0005         | 0.0005           | 0.0005         |
| CVA Metering Systems (£/month)                     | 50             | 50               | 50             |
| Base Monthly Charge (£/month)                      | 250            | 250              | 250            |
| <b>SVA</b>   |                |                  |                |
| SVA Metering Systems (£/msid/month)                | 0.00915        | 0.00915          | 0.00925        |
| Gen Energy SVA (£/MWh)                             | 0.013          | 0.013            | 0.013          |
| <b>Main Charges</b>                                |                |                  |                |
| Energy fee (£/MWh)                                 | 0.08716        | 0.08100          | 0.11153        |

ELEXON  
350 Euston Rd, London  
NW1 3AW, United Kingdom

Tel: 020 7380 4100  
Web: [elexon.co.uk](http://elexon.co.uk)

E L E X O N