Annual BSC Report 2018/19 31 MARCH 2019





Contents

Report from the Chairman	2
Headline Statistics	6
Business Review	10
BSC Change	14
European Developments	20
Working for Customers'	24
Our Performance and Services'	32
Committee Summaries	38

"We have been arguing for fundamental changes through simplification of the central arrangements and codes for a number of years, including through the Competition and Markets Authority enquiry."



ELEXON delivers Settlement services defined in the Balancing and Settlement Code (BSC) one of the main industry codes, which underpins the electricity wholesale and retail markets.

We are the Code Manager responsible for managing and delivering the 'end-to-end' services set out in the BSC:

- Code administration
- Service delivery, and
- Policy support

Through our wholly owned subsidiary [EMR Settlement Ltd] we also calculate, collect and distribute all the payments for Contract For Difference generators and Capacity Market providers, on behalf of the Government's Low Carbon Contracts Company and Electricity Settlements Company.

A watershed moment for the energy industry

The energy sector is undergoing a multi-dimensional transformation. The Department for Business, Energy and Industrial Strategy (BEIS) sees the energy industry as a key vector in delivering the Government's ambition of reshaping the British economy. The Industrial Strategy, Clean Growth Plan and a joint BEIS/Ofgem Smart Systems and Flexibility Plan have set a course of action for the energy industry.

Aligned with the priorities of the Smart Systems and Flexibility Plan, ELEXON's Board and the BSC Panel have continued to assess the changing energy landscape, and have directed ELEXON's activities to continue to help deliver the Government's ambitions in opening up the energy sector to enable consumers to benefit from new products and services.

Delivering a new, agile, flexible platform to enable change

The Board approved a new ELEXON strategy in the middle of the year. At its heart is the continued commitment to delivering our core services to our historic high standards while focusing on our customers' needs.

The strategy also commits us to ensure the BSC supports and enables innovation and new business models. This requires us to invest in our systems, and in particular to create a new, agile, flexible open data platform which delivers new functionality. We also want to invest in our people, on whose expertise the industry relies.

We welcome the review into the energy codes

In November 2018, BEIS and Ofgem launched a review of codes and code governance, which we strongly welcomed and continue to support. In our view the current codes landscape is not fit for purpose, as it is highly complex and fragmented. It can inhibit innovation and it does not facilitate good coordination across codes or code bodies.

We have been arguing for fundamental changes through simplification of the central arrangements and codes for a number of years, including through the Competition and Markets Authority enquiry.

To that end, we have shared our recommendations with BEIS, Ofgem and industry through a series of workshops and meetings, as outlined later. We have also published our proposals for consolidating the eleven energy codes (and code bodies) to three (or less). We will continue to help develop and implement firm proposals to deliver achievable outcomes for the benefit of industry and consumers.

Our leading role in design of Market-wide Half-Hourly Settlement arrangements

It is with pleasure that I highlight ELEXON's leading role on the design for Ofgem of the new Market-wide Half-Hourly Settlement arrangements and our initiative to enable customers to have more than one energy provider (now being progressed as Modification P379).

I also highlight our significant contributions to the industrywide Faster Switching programme, Electric Vehicle Energy Taskforce, the Energy Data Taskforce and ENA's Open Networks project on the Distribution Network Operator to Distribution System Operator transition, to mention just a few key sector initiatives.

We are playing an important role in all of these policy developments, while continuing to deliver 'best-inclass' performance for existing services we offer. These developments are in addition to our on-going efforts to coordinate and align change with other central bodies and code administrators. These activities are all discussed further in this report.

ELEXON's Budget:

We always seek to ensure we are providing our services efficiently and economically for BSC Parties and this is particularly so in the current market and regulatory environment. During the 2018/19 financial year BSC expenditure out-turned at £39.8m, contributing to a £3.8m underspend (nine per cent) against an annual budget of £43.6m. This was partly attributable to internal savings, as well as fewer market changes than expected and a rephasing of our investment in central systems. However, unused funding is returned to BSC Parties.

BSC Panel and ELEXON's Board – strong cross-industry representation

I was pleased to welcome two new members to the BSC Panel in October 2018:

- Lisa Waters, who brings deep-rooted knowledge and experience of the challenges faced both by BSC Parties as well as those outside of the BSC, including small generators, storage operators, and prosumers.
- Mark Bellman, who brings a wealth of experience and understanding of electricity Settlement both from operational and financial perspectives, along with an understanding of gas markets.

In March 2019, we were pleased to appoint Sara Vaughan and David Titterton to the ELEXON Board. Sara and David replaced Volker Beckers and Alison Chappell as industry Non-Executive Directors. Both Sara and David bring extensive industry experience with them, which will be highly valuable for the Board in addressing the challenges facing both the industry and ELEXON.

I would like to thank Volker and Alison for their valuable and diligent work over their six years on the ELEXON Board. They have both made major contributions in directing ELEXON's efforts to serve the energy industry and consumers now and in the future. We thank them for their service.

I am glad to confirm my view that throughout all these changes and challenges ELEXON has remained focused on delivering its services to industry-leading standards. This achievement was confirmed by the 2018 Ofgem code administrators' performance survey, where we were rated by industry as the best code administrator for the second year running.

ELEXON and the BSC Panel have much to offer in shaping the new world of digital and decentralised energy, and the transition to a consumer-focused, smart, innovative, and flexible energy system. Over the past year we believe our work has helped to move the industry forward and closer to achieving that goal. We are committed to building on and maintaining significant progress in the coming years.

Michael Gibbons CBE.

Chairman

"We are playing an important role in all of these policy developments, while continuing to deliver 'best-in-class' performance for existing services we offer. These developments are in addition to our on-going efforts to coordinate and align change with other central bodies and code administrators."

ELEXON's 2018/19 headline statistics

2.190 Settlement Runs Carried Out

2,190

2.75 million Energy Contract Volume Notifications (ECVNs) received

19 modification Proposals raised

11 Change proposals raised

2.75_m

19

We held 48 Workgroups and seven Issue groups Reviewed 102 consultations and responded to 47

Nearly a thousand new followers

48

102

Added to LinkedIN

Welcomed 351 attendees to our Introduction to the Energy market seminars and 538 attendees to 12 industry events 10 Supplier of Last Resort events managed

78 Trading Disputes raised

538 10 78

Issued 180 ELEXON Circulars

£501m of Credit

Cover managed

501m

Eight issues were raised

308 Credit Defaults managed with 34 notified publicly

08

new BSC Parties registered during the year

people registered for our webinars

308

A clean **BSC Audit**

(i.e. not qualified)

10 Modifications **Implemented**

16 Change Proposals **Implemented**

10

16

Our videos and recorded webinars were watched 5.842 times

5,842

Welcomed 12,317 external visitors to ELEXON

47 534 12,317

The BSC Panel Remuneration

ELEXON Board Remuneration

Section B2.11.5 of the BSC states that any remuneration or benefits awarded to the Panel Chairman and Chairman-appointed Independent Panel members should be disclosed in the Annual BSC Report.

Panel Chairman:

Michael Gibbons

Role: ELEXON Board and BSC Panel Chair

Remuneration/benefits:

- Annual fee for the combined roles: £160,290

- Benefits: £213.70

Panel Member:

Dr Phil Hare

Role: Independent Panel Member and Deputy Chair

Remuneration/benefits:

- Annual fee of £25,000 per annum
- £1,000 per additional meeting/per day, and £500 per half day
- £250 for each pre-Panel briefing meeting

Professor Derek Bunn

Role: Independent Panel Member

Remuneration/benefits:

 Annual fee of £25,000 per annum £1,000 per additional meeting/per day, and £500 per half day Section C4.4.5 of the BSC requires us to publish the remuneration and benefits payable to all of ELEXON's directors in their capacity of director of ELEXON. In accordance with Section C4.4.2, ELEXON's Chief Executive Officer does not receive any additional remuneration in his capacity as a director of the company.

Sara Vaughan

Non Executive Director (Appointed 1 March 2019) £2,400

David Titterton

Non Executive Director (Appointed 1 March 2019) £2,400

David Rigney

Non Executive Director, Senior Independent Director and Chair of the Audit and Risk Committee £34,800

Clare Duffy

Non Executive Director £28,800

Anne Heal

Non Executive Director and Remuneration Committee Chair £29,133.33

Former Directors:

Volker Beckers

Non Executive Director (Retired 28 February 2019) £26,400

Alison Chappell

Non Executive Director and Remuneration Committee Chair (Retired 28 February 2019) £30,063.63

nnual BSC Report

Number of meetings attended by BSC Panel members

BSC Panel Members are appointed by election (in the case of Industry Members) or by appointment by the Panel Chairman (in the case of Independent Members), National Grid Electricity Transmission System Operator and Citizens Advice (in the case of consumer representatives).

Details of Panel member attendance at BSC Panel meetings, both scheduled and ad-hoc, held from April 2018 to March 2019 are below. The figures in brackets show how many meetings each member was eligible to attend. A consumer representative attended each meeting.

The new Panel term started in October 2018, resulting in the appointment of new members following the elections, and retiring of some members. Therefore not all members would have been eligible to attend the 21 meetings held.

From 1 October 2018 Barbara Vest and Andy Knowles stood down. Stuart Cotten, Mitch Donnelly and Tom Edwards were re-elected. Mark Bellman and Lisa Waters were elected.

Number of BSC Panel Meetings

Attendance
21 (21)
20 (21)
18 (21)
18 (21)
17 (21)
1 (8)
5 (8)
9 (21)
18 (21)
12 (21)
3 (3)
17 (18)
10 (21)
10 (13)
13 (13)

"Given that the energy system is changing at an unprecedented pace with greater amounts of renewable generation and more smart technology becoming available, we believe that simpler code arrangements are desperately needed."

S



The Energy Codes Review

In November 2018, Secretary of State for Business, Energy and Industrial Strategy, Greg Clark, announced an energy codes review. The aim of the review was to consider options for improving the existing arrangements including re-visiting the Competition and Markets Authority's code governance remedies, in light of the latest energy market developments.

Based on our long history and high standards of code management and policy delivery support, ELEXON has shared its proposals on code consolidation and simplification with BEIS, Ofgem and the industry.

Over the past 20 years the energy codes landscape has evolved in a piecemeal way and while the codes play a key part in managing the energy system and ensuring the accuracy of Settlement, the arrangements have become very fragmented, inconsistent and difficult to navigate.

The BSC, which ELEXON manages, is only one of 11 codes across the energy sector, comprising six code managers and five code delivery bodies.

Given that the energy system is changing at an unprecedented pace with greater amounts of renewable generation and more smart technology becoming available, we believe that simpler code arrangements are desperately needed.

Streamling the number of codes and developing a change process, which is agile and inclusive will accelerate the efficient evolution of the energy market. It will also help to achieve the Government's ambition to decarbonise energy and support the ever-increasing numbers of innovative new business models and products that Suppliers and Aggregators wish to offer to consumers.

Consolidating and simplifying the codes will result in a much improved user experience. It will also ensure that we have more consistent processes across the codes, should more than one remain after the review.

We have proposed a 'Three Code model' bringing the current codes together across fuels alongside a number of proposals on 'quick wins'. We believe that these can be 'no-regret' improvements to code governance under the current model and landscape while wider changes are being implemented.

Full details of our views on reforming the codes is available in our ELEXON Policy View available online at www.elexon.co.uk.

Business Plan and Strategy

In our 2019/2020 Business Plan, which we issued to industry for comment at the end of 2018, we shared our revised vision for ELEXON, that by 2025 we will create the leading provider of central services to the GB energy sector for the benefit of consumers and market participants. The Business Plan was approved by the ELEXON Board and published in March 2019.

We believe there is clear scope for ELEXON to contribute to the energy industry transformation, as a trusted code manager and given the key role we play in developing and managing the electricity central systems and data platforms.

The key themes of our strategy are:

- Quality delivery actively managing our services to ensure that we deliver in a reliable, economic and efficient way
- Leading technology platform Working to develop a new software platform which provides a scalable and flexible, cloud-based service to replace the BSC central systems
- Innovation developing new market solutions to support moves to a smater more flexible energy system
- Engagement working in partnership to enable a whole-system approach and industry convergence
- Customer centric improving the customer experience and developing deeper customer relationships
- Simplification and Consolidation reforming the energy code landscape so it is fit for the future
- Digital platform a flexible, scalable platform to meet the needs of the evolving energy market
- Talented people developing our 'end-to-end' service capabilities to enable industry to benefit from our extensive experience

Supporting delivery of the Government's smart systems and flexibility plan

We are playing an important role in shaping and delivering changes which help the transition to a smarter, more flexible, lower carbon energy system.

For example, in April 2018 we published a White Paper setting out how ground-breaking reforms could be made to the BSC enabling customers to buy and sell electricity from, and to multiple providers. This has been developed in to Modification Proposal P379 (which you can read about later in the report).

Our aim is to make it easier for businesses to trial new products and services without having to become a BSC Party. Our BSC 'Sandbox' allows them to do this and when Ofgem approved Modification P362 in August 2018 we became the first code administrator to offer such a service to our customers.

In February 2019, we opened up the Balancing Mechanism to allow independent aggregators to participate both in this, and also in Project TERRE – the Trans-European Replacement Reserves Exchange. More detail on this is also available later in the report. This will create more opportunities for demand-side response aggregators to participate in the energy markets.

We have also provided our expertise to the following:

- National Grid's 'Power Responsive' demand-side response stakeholder group,
- initiatives by the Government on flexibility
- work by think tank Sustainability First
- inputted into the Centre for Sustainable Energy's work through the Public Interest Advisory Group, which looks at access to smart meter data for the public benefit

Throughout the year, ELEXON has continued to engage across stakeholders, including Government, Ofgem, BSC Parties and innovators to work together to find solutions to their issues.

Target Operating Model for Market-wide Half Hourly Settlement (MHHS)

Ofgem launched its Significant Code Review on Electricity Settlement Reform in July 2017. Since then, ELEXON has chaired and led Ofgem's Design Working Group (DWG) in developing the Target Operating Model (TOM) for Marketwide Half Hourly Settlement (MHHS).

Moving to MHHS is a fundamental change for the electricity market, which will unlock the benefits of smart meters for consumers by paving the way for more 'time of use' tariffs, where consumers can save money if they use more of their energy at other times of the day instead of during peak demand periods.

MHHS together with smart meters allows Suppliers to bill consumers more efficiently. In turn this allows them to offer new tariffs and services. MHHS should have wider benefits enabling the case for commercialising electricity storage as well as encouraging development of electric vehicle to grid technology, peer to peer trading and other flexibility services.

"We mitigate this risk by holding credit collateral from all Suppliers and by ensuring that there is a quick process for alerting key stakeholders of a default."

The DWG delivered its preferred TOM design to Ofgem in January 2019 and consulted on this during February and March. The responses validated the overall approach and coverage of its design and resulted in no fundamental changes to the TOM.

The DWG is now developing its approach for transitioning from the current arrangements to the TOM and a consultation was published in June 2019. The group will submit its final report to Ofgem in summer 2019, for use in Ofgem's Full Business Case Significant Code Review decision on when and how to implement MHHS.

Managing the exit of Suppliers from the electricity market

In a challenging year for Suppliers we managed 31 events of default, a significantly higher number than any previous year. The defaults included 10 instances of Suppliers exiting the electricity market under the Supplier of Last Resort arrangements. In these cases we worked closely with Ofgem to ensure that more than 800,000 customers were transferred to the new Supplier without delay.

Following consideration by the BSC Panel, seven of the defaulting Parties were expelled from the Code. All defaults were reviewed on a case-by-case basis and, where necessary, actions to restrict the operation of a BSC participant were agreed by the BSC Panel.

No one wishes to see Suppliers exiting the market. It impacts on consumers, who either have to shop around, or wait to be transferred to a new supplier. It also impacts on remaining companies that have to cover their unpaid BSC costs. However, as with any market, companies do fail from time to time and market entry and exit is a sign of a healthy market. Therefore we are prepared to manage such scenarios with care and attention to ensure that the impacts of such events are minimised for remaining BSC Parties and their consumers.

We mitigate this risk by holding credit collateral from all Suppliers and by ensuring that there is a quick process for alerting key stakeholders of a default.

The credit arrangements and payment terms in the BSC are stringent, but necessarily so. The credit process can trigger a default as soon as 24 hours after an issue occurs, with automatic restrictions on parties trading wholesale electricity to minimise the exposure of other BSC Parties. Our payment terms require daily settlement with default proceedings applied after three business days.

We will continue to be vigilant on this issue over the coming year. We have also given consideration to areas that could be further improved to protect BSC Parties further from a failing Party and have shared our views with Ofgem and industry. In sharing our expert views and experience on the current process a Modification has been raised by industry to consider 'Improving the efficacy and efficiency of the Section H Default provisions' through BSC Modification P385.

The Retail Energy Code

During 2018/2019, Ofgem continued working on the Faster Switching Programme which will enable consumers to switch their energy Supplier reliably and more quickly through a central system. These arrangements are to be governed under a new industry code, the Retail Energy Code (REC).

We believe that consolidating the retail aspects of the market into one code is a great example of how the existing arrangements can be streamlined. The REC will benefit suppliers and their customers, by recognising that the market is dual fuel in nature.

During the course of this work Ofgem published two consultations on proposed modifications to regulation and governance (June 2018) and a statutory consultation on licence modifications (October 2018).

We responded to both Ofgem's consultations, drawing on our experiences of delivering the code management and code delivery functions to the highest customer satisfaction levels. We shared our opinion that a greater alignment of central code services and systems was possible, bringing the 'whole systems' approach (electricity, gas, transport and heat) to life.

In January 2018, Hudson Energy raised Modification P365 enabling ELEXON to tender for the REC code manager role. Ofgem approved this change in April 2018, after the BSC Panel unanimously recommended that they do so.

The basis of the P365 proposal would see ELEXON adopt similar arrangements to those where we provide the EMR Settlement services, should we win the tender for the REC Code Manager role.

In that event, the REC activity performed by ELEXON would be ring fenced from the BSC, but have an arrangement to defray costs to BSC Parties through the sharing of overheads.

"Given that the energy system is changing at an unprecedented pace with greater amounts of renewable generation and more smart technology becoming available, we believe that simpler code arrangements are desperately needed."



It has been another very busy year for development of changes to BSC rules. Over the year we implemented 10 Modifications and 16 Change Proposals.

In this section of the annual report we set out the types of Modifications that have been raised over the past year, and how the process for consulting on Modification proposals has been speeded up where possible.

We also talk about the role we plan as a 'critical friend' in the code modification process where we actively develop options for reforms, proactively manage the change process and work closely with BSC Parties who are raising proposals.

Types of Modifications raised

We have seen 19 new Modifications raised over 2018/19 with more than half raised in the last four months of the year.

We held 48 workgroup meetings (the same number as the previous year) and this remains historically high. We form workgroups to discuss change proposals with volunteers from industry. This ensures that complex issues are rigorously debated with potential solutions clearly thought through to avoid negative unintended consequences.

The type of Modifications raised can be seen in the graph below.

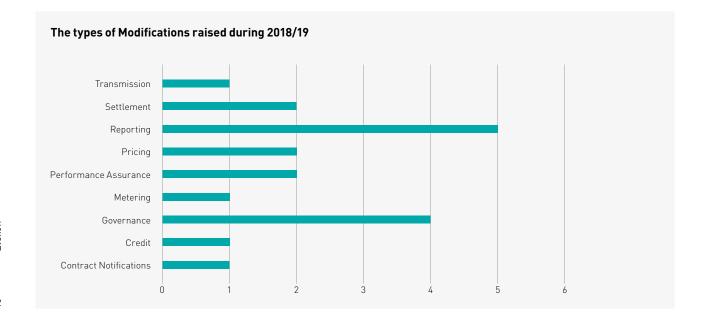
We have seen fewer BSC Parties raising Modifications this year, however National Grid Electricity System Operator has raised more Modifications, primarily to meet the suite of European obligations put forward by the European Network Code, designed to facilitate the harmonisation, integration and efficiency of European electricity markets.

Speeding up the change process and making it more efficient

The BSC Panel raised six Modifications over the past year compared to one in the previous year. All six were raised to improve the efficient operation of the BSC. Two of the six were raised to increase the speed, efficiency and inclusivity of the change process and make it easier for companies to participate in it.

One of the most important changes which was raised and approved by the BSC Panel was P370, which allows the Panel to designate non-BSC Parties to raise code Modifications. It also opened up opportunities for non-BSC Parties to raise Issues.

This is an important step forward in helping more new business models and other new entrants to engage in the BSC change process, which supports the development of the future energy system.



The other five approved changes are:

- P367: which removed obsolete Supplemental Balancing Reserve (SBR) and Demand Side Balancing Reserve (DSBR) arrangements from the BSC
- P368: which has been implemented to improve the flexibility of the Performance Assurance Framework timetable. This Modification resulted from the Performance Assurance Framework (PAF) Review
- P372: which has been approved so that the efficiency of the assessment of changes to BSC reporting can be improved (moving detail out of BSC Section V into a new subsidiary documents)
- P377: which has been implemented to introduce the recommendations of the Market Index Data (MID) review by improving the cost reflectiveness of the MID
- P381: which will remove the requirement to publish quarterly BSC Reports, as the information is already available elsewhere in a timelier manner

A number of these Modifications above demonstrate how ELEXON continues to live by the Code Administrators' Code of Practice (CACoP) principles, a set of undertakings that each code administrator agrees to adhere to. Amongst other things, the principles require administrators to promote effective consultation for code changes and ensure that codes are governed in a transparent, impartial and cost effective way.

For example, Modification P370 demonstrates how ELEXON delivers against CACoP Principle Five (Code Administrators shall support processes which enable users to access a 'pre-Modification' process to discuss and develop Modifications) and Principle 14 (Code Administrators shall support prospective energy innovators).

Overall, the actual number of Modifications going straight to the Report Phase has increased from three in 2017/18 to eight in 2018/19.

This is important for two reasons. Firstly it shows that changes can be progressed more quickly where the solution is already well understood. Secondly, it ensures that change proposals only involve Workgroup assessments where a solution is incomplete, complex or not well defined. This is important for helping to save time and resources for both ELEXON and Industry.

Acting as a 'critical friend'

We act as a 'critical friend' either by working with companies that are proposing changes to BSC rules, or developing policy which can be used to form Modification Proposals. The latter is especially important to us for changes which relate to the smarter energy system. This is because we have a strategic objective to support the transition to a smarter, more flexible system.

Over the past year we have played a major role working closely with the proposers of Modifications P375, P376, P378 and P379.

P379, raised by New Anglia Energy, is the result of the policy thinking set out in our White Paper 'Enabling customers to buy power from multiple providers' published in April 2018. The Modification will enable individual consumers to be simultaneously supplied by more than one Supplier through a single Settlement Meter at the Boundary Point.

Currently the BSC rules only allow a customer to be supplied by one Supplier at a time - a rule established at the opening up of the electricity market. The Proposal will amend the market rules to support development of non-traditional business models and innovation. (This will expand on the solution to be implemented by BSC Modification P344 'Project TERRE implementation into GB market arrangements' which will be discussed later in this report.)

For example, a customer could contract with an electric vehicle leasing company for all the power they need to charge the vehicle, while also having a separate arrangement with another Supplier for their remaining electricity needs, both coming through the same meter.

P375 and P376 built on Issue 70 and 71. P375 proposes to settle Secondary Balancing Mechanism (BM) Units using metering equipment behind the defined Boundary Point for Balancing Services (known as 'behind the Meter'), rather than settling using Metering Equipment at the Boundary Point as per current BSC obligations.

P376 proposes to allow the Final Physical Notification, which feeds into the Settlement of Trading Charges to be created via a Baselining Methodology. The new Physical Notification will be de-coupled from the Physical Notification used by National Electricity Transmission System Operator (NETSO) for dispatch. This change will allow Balancing Service Providers, especially Demand-Side Response Providers, to be fully recompensed for their actual change from normal usage and the impact this change has on the system. It therefore enables greater participation in in the Balancing Mechanism.

It is also important that we react quickly in developing solutions to help manage unplanned issues that affect BSC Parties. A good example of this was the speedy support we gave to the Proposer of P378 which was seeking to use the BSC to introduce a Capacity Market (CM) Supplier Interim Charge for Suppliers with effect from 1 January 2019 following suspension of the CM.

Ofgem ultimately rejected this Urgent Modification, determining it did not have the power to approve it. However, we received praise from industry and the BSC Panel for developing, consulting on and submitting the proposal for approval to Ofgem within six weeks.

We also supported the Proposers of a number of more traditional Modification Proposals throughout the year. One example is P366, which seeks to amend how Supplier Charge SP08a is applied to Non Half Hourly non-domestic Meters that are hard-to-read. The Proposer believes that applying Supplier Charge SP08a to hard to read Metering Systems is anti-competitive and limits consumer choice.

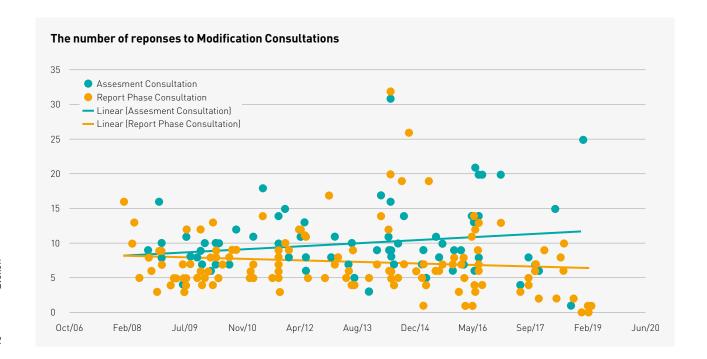
Changes in how industry responds to consultations

The volume and complexity of change in the industry is on the rise as we transition to a smarter system. This in turn puts additional demands on BSC Parties and ELEXON to work through change proposals. High levels of change could result in the need for BSC Parties to prioritise which changes they engage with.

In the initial stages of the process for Modifications involving major changes to BSC rules, an Assessment Procedure consultation is issued, where the Panel asks industry stakeholders for views on a Workgroup's assessment of the issue and proposed solution.

At a later stage the industry is also asked to comment on the BSC Panel's initial recommendations on the Modification through a report phase consultation. As the graph below shows (number of responses to Modification Consultations) over the past few years the number of responses to Assessment Procedure Consultations has generally increased, while the number of responses to Report Phase Consultations has fallen.

This could suggest that there are a small number of Modification proposals which are having a greater impact on industry leading to a greater number of responses. There is also recognition that industry participants may not have the time or resources to respond twice to the same Proposal (at the Assessment Procedure and Report stage Phases).



"We actively look at ways to improve the consultation process for Modifications, Issues and CPs to reduce the burden on the industry, increase efficiency and save resources."

Reduction in the number of Change Proposals and increase in the number of Issues.

Change Proposals (CPs) make changes to the BSC subsidiary documents and are largely driven by ELEXON. Around (82%) of CPs were raised by us since 2015, while 13% were raised by BSC Parties and five per cent were raised by National Grid ESO.

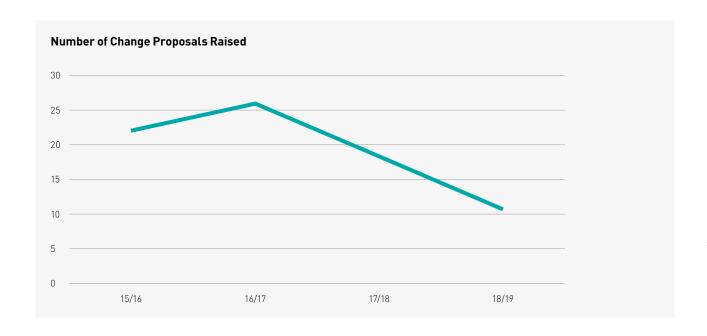
The number of CPs raised continues to fall as shown in the graph below (Number of Change Proposals Raised) This is likely to be because more focus is being put on Modifications and Issues.

Issues are raised where problems or potential improvements to the current arrangements have been identified, but it's not known how best they should be resolved. Since 2015/16 the number of Issues raised has been rising, with 2018/19 seeing nine new Issues raised.

The complexity of the Issues being considered has also increased. Issue Groups typically only need one meeting to make recommendations. Of the nine raised in 2018/19, four required more than one meeting. For example, Issue 72 and Issue 73 have both been looking at problems related to third party providers involved in the metering arrangements, bringing the complexity of understanding from other market players into the process.

We actively look at ways to improve the consultation process for Modifications, Issues and CPs to reduce the burden on the industry, increase efficiency and save resources. To this end we have introduced video conferencing for workgroups to make it easier for people to be involved. We now publish all Workgroup materials on the website to support stakeholders that are not able to participate in meetings.

In addition ahead of the BSC Panel meetings we hold a monthly telephone conference where stakeholders and Parties can hear a synopsis of the business of the Panel f or that month.



"We remain well prepared, for whatever outcome including the possibility of a 'no deal' Brexit."

Brexit and preparations for a possible 'no deal' outcome

We have spent 2018/19 preparing the BSC for all the immediately foreseeable major outcomes from Brexit and so we remain well prepared, for whatever outcome including the possibility of a 'no deal' Brexit.

In April 2018, the European Commission published a stakeholder notice on Brexit and the internal EU energy market. This was one of a series of papers looking at each sector in turn based on the Commission's interpretation of the legal position in the event of a 'no deal' scenario. This notice included a statement that 'UK based operators will cease to participate in the European balancing platforms.'

This position by the Commission would clearly affect Great Britain's participation in the Trans European Replacement Reserve Exchange (TERRE) so we have also considered this possibility in our planning.

In October 2018, we published a statement on 'How Code Administrators are preparing for Brexit'. This statement was developed in coordination with other GB code administrators, which published similar statements.

In March 2019 and on behalf of ELEXON, National Grid ESO raised a 'no deal' Brexit Modification (P382), given the initial Brexit withdrawal date of 29 March 2019. In essence this was a 'housekeeping' Modification and therefore would follow the self-governance process.

We have said that while the BSC will remain operative immediately following the exit day, in the event of a 'no deal' scenario, if no Modification were made there would be technical inaccuracies in the BSC, which could lead to confusion for anyone not familiar with the relevant Brexit legislation. At its April 2019 meeting the BSC Panel decided to postpone a decision on whether to implement P382 until its October 2019 meeting at the latest, given the extension of the withdrawal date.

Therefore ELEXON is prepared for Brexit. However, in line with the default assumption adopted by the energy industry during 2018/19, most of our European-related work this year has been on the assumption that the UK continues to be bound by European energy law.

Indeed, we know that some EU-derived obligations are to continue in all foreseeable scenarios, because the Government proposed that they be retained in UK law even in the event of 'no deal'.

Planning for the implementation of EU Network Codes and Guidelines in GB

We have continued to update our cross-code European Network Code implementation plan each month.

ELEXON has also continued its membership of both the Association of European of Energy Exchanges (Europex) and Energy UK. In addition we sit on the pan-European Market European Stakeholder Committee as a Europex representative, alongside other European stakeholders; and also on Energy UK's European Committee, on behalf of ELEXON.

European Electricity Balancing Guideline (EB GL)

The implementation of the EB GL continued to drive much of ELEXON's European work this year. We list the key EB GL developments below.

Publication of Information on BMRS (EB GL Article 12)

National Grid ESO raised BSC Modification P384 in March 2019. This followed on from ENTSO-E proposals to change the data requirements for the European Transparency Platform, to which BMRS supplies data. The ENTSO-E proposed changes were themselves driven by elements of the EB GL Article 12 that are coming into force in December 2019.

National terms and conditions for imbalance Settlement and balancing (EB GL Article 18)

Article 18 of the EB GL requires National Grid ESO to propose national terms and conditions for imbalance Settlement and balancing. In addition to proposing those terms to Ofgem by 18 June 2018, National Grid ESO issued its public consultation on this in May 2018 and ELEXON responded to support the proposal, which was for it to comprise the existing industry framework (including the BSC).

In February 2019, Ofgem published its formal Request for Amendment of the Electricity Balancing Guideline (EB GL) Article 18 proposals made by National Grid ESO. In response, National Grid ESO published a consultation on its amended proposals. ELEXON responded with comments mainly regarding the detail of the mapping from Article 18 requirements to the BSC.

Related to this is BSC Modification proposal P374 which covers the changes to the BSC Modification process that may be required to comply with the EB GL Article 18 change process. The first P374 Work Group meeting took place in February 2019.

Project TERRE (EB GL Article 19)

One of the legal requirements of the EB GL is for European TSOs to design and build arrangements for sharing different types of electricity balancing services through Project TERRE.

We are working closely with National Grid ESO to develop and launch the software platform to support the project, later this year. The principle BSC Modification to enable the implementation of TERRE, as well as wider access to the GB Balancing Mechanism, is P344. This has been a highly complex Modification, which was raised in June 2016. Many people across the industry along with ELEXON have been involved in its design, development and implementation. Ofgem approved P344 in August 2018 and it was implemented in February 2019.

However, not all the TERRE BSC obligations are active yet. The intention is that all of the TERRE BSC obligations will become active to align with the European implementation of TERRE, expected to be in December 2019.

National Grid ESO raised a supplemental BSC Modification Proposal P380 in February 2019 in the light of changes to the European TERRE design. In March 2019, the Authority approved P380 for implementation in June 2019.

Project MARI (EB GL Article 20)

Another of the European balancing energy projects is for Manually Activated Frequency Restoration Reserve, project MARI.

As with TERRE, European TSOs finished developing their formal proposal for MARI during 2018. ELEXON responded to the consultation on the draft proposal in July 2018 and the TSOs submitted their final proposal to European regulators in December 2018, as required by the EB GL.

We expect European regulators to decide on this proposal by August 2019. The legal implementation deadline for MARI will be set once the regulators approve the proposal. At that point, it is likely that a BSC Modification to support the implementation of Project MARI will be required.

Harmonisation of imbalance Settlement (EB GL Article 52)

Article 52 of the EB GL requires all Transmission System Operators (TSOs) to make harmonisation proposals for key elements of imbalance Settlement. ELEXON continued to support the ENTSO-e working group for this over the past year.

Together with National Grid we jointly hosted a workshop in August 2018 to discuss the proposals with industry. We have published the slides and a brief summary on the ELEXON website. The consultation closed in September 2018. ELEXON's response can be found online at www.elexon.co.uk.

European TSOs formally submitted their proposal for the harmonisation of imbalance Settlement in December 2018.

We expect European regulators to decide on this proposal by August 2019. The implementation deadline will be set once the regulators approve the proposal. At that point, it is likely that a BSC Modification to support its implementation will be required.

European Regulation on Energy Market Integrity and Transparency (REMIT)

We continue to host the GB electricity REMIT inside information platform on our Balancing Mechanism Reporting Service. Therefore, during 2018/19 we have closely engaged with ACER, the European Agency for the Cooperation of Energy Regulators, whenever it has suggested potential changes in requirements from such platforms across Europe.

In May 2018, ACER published an open letter that indicated that it would prefer market participants to use inside information platforms (IIPs) over company websites to report inside information and would 'consider options for future changes. These include the possibility of registering IIPs and making the use of these platforms compulsory.'



"Satisfaction among stakeholders with ELEXON's service has increased further, with 86% of those surveyed satisfied or very satisfied with our services and support."

Annual BSC Report

Customer Operations

An important part of our work centres on offering high quality support to companies that are entering, operating in, or exiting the electricity market.

We tailor our services to meet the needs of our customers and we offer our expertise and guidance on a range of issues.

We also offer training, in person or via webinars, on a range of subjects and our 'Introduction to the Energy market' seminars continue to be popular.

We continue to publish a variety of reports analysing trends in the market and we closely monitor performance of BSC Parties. Our regular reports include the System Price Analysis Report, BSC Operations Headline Report, and the Smart Meter Technical Detail (MTD) Report.

During 2018/19, ELEXON:

- Held 45 meetings with potential new entrants giving them the opportunity to understand the BSC and how it works, before they consider acceding to it
- Helped 35 customers accede to the BSC (formally signing a contract to participate)
- Completed 47 Registrations where companies complete the market entry process and are registered in a role (for example, as a Supplier or a generator)
- Ensured that 12 Parties left the market smoothly
- Managed 28 qualification applications and 13 re-Qualifications
- Carried out 157 meetings and 965 teleconferences with customers, led by our Operational Support Managers (OSMs)
- Conducted 95 training sessions covering a variety of topics such as:
 - Imbalance Settlement
 - Management and Resolution of Estimated Annual Consumption (EAC) and Annualised Advance (AA)
 - The Performance Assurance Reporting and Monitoring System (PARMS),
 - Credit and trading disputes
 - Hosted five 'Introduction to the Energy industry' seminars

Our Annual BSC Meeting and Seminar offers delegates the opportunity to hear about the key priorities for ELEXON and what we want to deliver for the industry, as well as hearing from leading keynote speakers.

Our 2019 seminar takes place on July 11 and will feature keynote speeches from Mary Starks, Executive Director of Consumers and Markets, Ofgem and Joanna Whittington, Director General, Energy and Security at BEIS.

Customer Survey Results 2018

We are pleased that the 2018 customer survey where energy companies and other stakeholders rate our performance as manager of the BSC, showed that almost all respondents (92%) believe our service has stayed at a high level or improved, our highest score in seven years.

The survey, conducted between November and December 2018 by an independent market research company, also showed that 74% of respondents would speak highly of ELEXON, an increase of 13% compared with 2017.

Respondents said that we have improved the quality of our communications, with increased satisfaction with the website and the ELEXON portal. More of our customers are taking up our offer of webinars, and satisfaction with these increased by 10 per cent. This is good to see as it helps our customers to reduce their time commitments while participating in BSC developments.

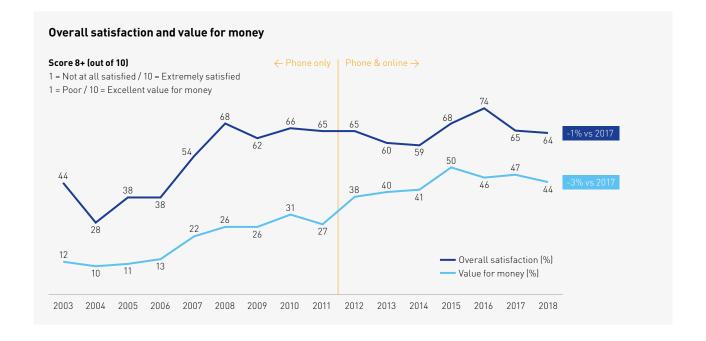
In particular, it was good to see that the survey showed a continued appreciation for our expertise, the way in which we support and guide the industry and our work of being a 'critical friend' to industry.

The graph below charts our progress on achieving customer satisfaction.

The survey is designed to reveal where we can improve, as well as giving opportunities for stakeholders to rate our performance:

- Generally respondents want us to communicate more proactively and make greater use of technology when hosting meetings
- Smaller companies want us to engage more directly with them and gain a deeper understanding of their business
- The largest energy companies and Supplier agents want us to improve some of our dedicated support services

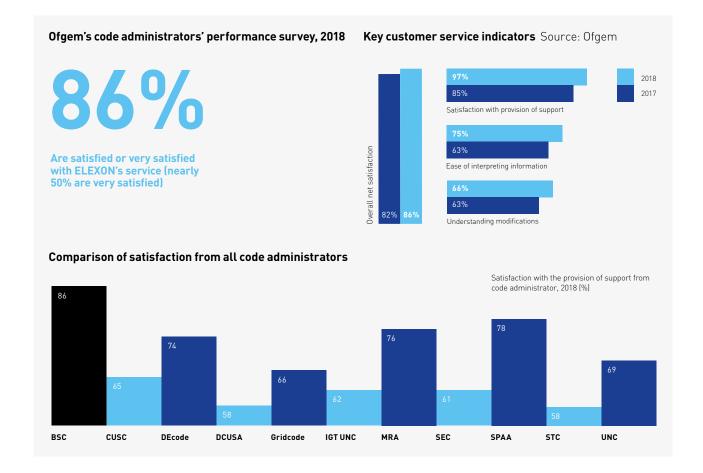
We are now identifying actions we can take in these areas so that we continue to offer 'best in class' performance among code administrators.



Ofgem's Code administrators' performance survey

The regulator Ofgem published the results of its second survey of code administrators' performance in October 2018. We were very pleased to have come out top overall for the second year running.

Satisfaction among stakeholders with ELEXON's service has increased further, with 86% of those surveyed being satisfied or very satisfied with our services and support. More details are set out below in the graph (Ofgem's code administrators' performance survey, 2018)



Improving the ELEXON BSC website

Electricity Market Reform Settlement Services

Our new look website was launched in April 2018 and has continued to be developed to improve content readability, accessibility and overall site functionality.

Key content improvements include:

- More ELEXON Insight articles, where our subject matter experts offer unique analysis of important activities within the electricity industry
- Interactive graphics that enable customers to drill down into snapshots of our data
- A Performance Risk visualisation tool to help customers identify where Settlement risks commonly occur in the BSC processes

We endeavour to develop the site and our content to meet our customers' expectations.

We anticipate creating more video content as this format supports training opportunities for customers unable to visit our office and is an effective and efficient means of keeping our customers up to date.

Our Twitter and LinkedIn channels are also benefiting from the content production on the website and enabling us to increase our communication reach on these platforms. As well as managing the BSC, ELEXON also provides electricity Settlement services (including calculating, collecting, and distributing payments) for Contract For Difference generators and Capacity Market providers, on behalf of the Government's Low Carbon Contracts Company (LCCC) and Electricity Settlements Company (ESC).

This activity is ring fenced from BSC activities and is conducted via a separate subsidiary of ELEXON — EMR Settlement Ltd (EMRS). EMRS costs are borne by the LCCC and the ESC and not by BSC Parties. However, because EMRS occupies the same premises as ELEXON and uses ELEXON's shared services, EMRS makes a fair contribution to these costs based on headcount. This has resulted in around £726,000 in 2018/19 of ELEXON's fixed costs to be charged to LCCC and ESC, which would otherwise have been borne by BSC Parties.



nnual BSC Repor ما

ELEXON's Digitisation Programme - Foundation Platform update:

This year, we started implementation of the first iteration of our Foundation Platform. It is a new digital platform based on our flexible technology architecture, which will enable us to handle increasingly complex changes in the energy market.

The platform is being delivered under a multi-year programme of work so that these major changes can be introduced in phases to aid the smooth running of BSC systems. As part of the programme we are digitalising and virtualising our core agent services to create a scalable and flexible digital platform for the industry.

Once established, our platform will enable us to deliver more efficient, effective and flexible BSC operations including faster delivery of future change. It also reduces the risk of undertaking complex BSC changes. This is because changes to the BSC will be implemented neatly into one software solution rather than into multiple processes and software platforms as at present.

The key features of the platform will be:

- A data platform using open cloud services to receive, process and publish data and insights
- A calculations platform to perform scalable, flexible and modular Settlement operations
- A customer platform that will simplify and reduce the number of processes, to provide an intuitive digital front end, aiding market entry and registration for new and existing entrants

We have been designing and developing the platform in stages. We produced the Solution Architecture for delivering P344, the BSC changes required to support widening access to the Balancing Mechanism and Project TERRE, in April 2018.

Implementation of this solution started in May 2018 and helps us to de-risk delivery of P344, while delivering core components of the new platform. We are on target to to complete implementation by December 2019 in time to meet our obligations under P344.

We have been implementing the solution under multiple work streams, applying agile delivery principles where appropriate. The first part of the solution was delivered in February 2019, enabling virtual lead parties (VLPs) to start the process of acceding to the BSC.

The first version of our Salesforce-based customer platform, which plays a key role in helping VLPs, is now ready and will be available for internal use from Summer 2019. This will be followed by an external rollout for the benefit of BSC Parties once additional enhancements to create a seamless customer journey have been implemented.

Design and development for the Settlement portions of the P344 solution is in progress. We plan to test the integration of this with industry and National Grid ESO this summer.

In 2019/20, we will evolve our data strategy to identify ways to make more data and insights freely available to the market and support increases in data volumes, whilst accelerating our ability to deliver change. We also aim to start work on the second iteration of the Foundation Platform. It will focus on enhanced customer experience and data access, as well as adapting and evolving the implementation roadmap and pace to meet industry needs.

2018/19 BSC Audit

We delivered a number of key improvements to the BSC Audit in 2018/19. We undertook this work in order to address industry feedback and ensure that ELEXON and its audit service provider deliver the BSC Audit in a risk based, proportionate and effective manner.

The most significant improvements to the BSC Audit service included:

Reduction in audit data requests

- Overall reduction of approximately 40%
- Data requests for some BSC roles reduced by up to 100%
- This was achieved through revisions to testing and utilising new and existing data sources

Significant improvements to six DTN test scripts

- 48% to 95% improvement in Data Transfer Network (DTN) test accuracy.
- Development of new DTN tests was not pursued as we were keen to ensure that the existing tests were reliable and effective before kicking off development on new test scripts

Twelve new industry data flows procured

New DTN tests will be enabled thanks to the provision of these additional flows

Audit Planning Memorandum (APM) Changes

Improvements to clarity and detail

Introduction of Root Causes to BSC Audit Issue reporting process

 Better aligns with Performance Assurance Framework review as greater insight results in greater value

Settlement Risk Mapping

 BSC Audit scope and testing now aligned with ELEXON's new Risk Evaluation Register and Risk Operating Plan to ensure the delivery of a risk based audit

We have received positive feedback for some of these changes and we are committed to deliver further improvements and changes in future audit cycles. The 2018/19 BSC Audit report is also being redesigned to ensure that it is aligned to risk and provides insight and assurance over the risk areas the industry cares about most.

KPMG presented its final report to the BSC Panel for the period April 2018-March 2019 in June 2019.



Annual BSC Repor

Technical Assurance Agent

Trading Disputes

On behalf of ELEXON in its role as the Technical Assurance Agent (TAA), energy services company C&C Group provide the Technical Assurance of Metering Service.

This service involves visiting customer sites ensuring that the meters installed meet our requirements and providing accurate data for electricity Settlement processes. In turn this gives ELEXON's stakeholders confidence that electricity Settlement operates efficiently and accurately.

In conjunction with the Performance Assurance Board, ELEXON and the TAA agreed six changes to the TAA process, which were introduced at the beginning of the 2018/19 audit year:

Central Volume Allocation (CVA) Multi-For the TAA to audit all circuits relating circuit Inspection Visits Issu to each CVA Metering System Identifier (MSID) selected for audit in the CVA main sample Offshore wind farm Inspection Visit trial To audit three offshore wind farms over the course of the audit year To allow ELEXON to identify cases Logging instances in the Technical Assurance Agent Management Tool where Commissioning has not been (TAAMT) where Commissioning could not completed due to insufficient load be completed due to insufficient load Auditing Meter Operator Agents (MOAs) Assigning non-compliances to and Licenced Distribution System LDSOs as well as MOAs depending Operators (LDSOs) against P283 on which part of the Commissioning regulations documentation (Part 1 or Part 2) is missing. This change was to bring the audit in line with P283 regulations Amending the time threshold for clock This change was to prevent Category 1 non-compliances being recorded timing errors where there is minimal material impact on Settlement (i.e. less than the £3,000 Trading Dispute threshold). The threshold for raising a Category 1 noncompliance was changed to 1 minute for Codes of Practice (CoPs) 2, 3 and 5 Notification to ELEXON for Category 1 To implement an escalation process for non-compliances where there was no Category 1 non-compliances receipt of a rectification plan within 10 Working Days

The disputes process allows BSC Parties to correct errors in Settlement that have affected Trading Charges.

During 2018/19, 78 Trading Disputes were raised, however none were referred to the BSC Panel.

Performance Assurance Framework Focus

We have been conducting a thorough review of the Performance Assurance Framework during the year to:

- Better engage with Parties
- Meet the current and future assurance needs of the Panel, the Performance Assurance Board (PAB) and the wider electricity industry e.g. through smart metering, alternative business models and Central Volume Allocation (CVA) risk
- Improve the measurability of Settlement error and the mitigating effect of assurance activities
- Deliver a valued and trusted assurance service to BSC Parties under the strategic and tactical guidance of the BSC Panel and PAB

We have developed a new Settlement Risk register, which went live 1 April 2019, and put in place enhanced risk evaluation and management procedures. The project is scheduled to run to Spring 2020, as we review 13 of the assurance techniques the PAB can use to mitigate the Settlement Risk, with approved recommendations being implemented as each piece of work completes.

"Improve the measurability of Settlement error and the mitigating effect of assurance activities."

Corporate Social Responsibility

ELEXON's Corporate Social Responsibility (CSR) Strategy is built around four themes (Environment, Community, Workplace and Marketplace) and ensures that we behave in a sustainable, socially and environmentally responsible manner while supporting our ambition, values, brand and business objectives.

Environment

ELEXON's environmental policy provides its staff with clear responsibilities and guidance on how we manage our impact on the environment in our day-to-day work activities. We aim to reduce our environmental impact through staff awareness campaigns, and by monitoring our energy consumption and recycling our waste. We also offer staff opportunities to use environmentally friendly means of transport. For example, through our cycle to work scheme where ELEXON employees can spread the cost of purchasing a new bicycle through salary contributions.

We use smart metering technology to help us identify where we can make savings, in lighting controls, air conditioning running times and by turning off IT equipment.

Community

At the beginning of April 2017, we started a three-year partnership with two new charities, Guide Dogs for the Blind and the Alzheimer's Society, both of which were chosen by ELEXON employees. During the first year, employees raised over £1,500 for each charity through various fundraising activities. This year, they successfully raised almost £3,200.

As well as supporting fundraising activities, we encourage our employees to use volunteering days, or individually participate in charitable activities. From running marathons to charity boxing matches, and cycling, our staff are frequently willing to raise money for both the company charities and personal causes.

Marketplace

This year we have continued to embed Corporate Social Responsibility into our Supplier tender process as a standard consideration with a weighting applied to Suppliers' commitment to it. We have been working with new or potential Suppliers and service providers to ensure they are providing CSR credentials compatible with our own. Also by working proactively with Suppliers, we are improving our supply chain to ensure we do the right thing by everyone.

Workplace

As a business, we believe our people are our greatest asset, and we depend on the skills and commitment that they bring to the organisation. We recognise that to provide a great place to work, we need to retain our focus on health, wellbeing, flexible-working, and personal development. This year, our initiatives have included a well-being campaign during Mental Health Awareness Week and ongoing health and safety training.

We generate and preserve value over the longer term by continuing to focus on developing our people's expertise in order to build capability in the business as we gain a better understanding of the skills needed to perform in a rapidly changing energy market.

We do this by:

- Providing training, coaching and mentoring to ensure we achieve the right balance between a high degree of flexibility and the robust, predictable service delivery for which ELEXON is recognised
- Building on our Silver Investor in People accreditation to reach the next level of accreditation
- Maintaining our focus on knowledge sharing and transfer to enable our experts of tomorrow

We communicate and maintain good employee relationships by ensuring that:

- We undertake a staff survey each year, with any issues found forming part of an action plan for the forthcoming year
- Employees have regular contact with senior managers and members of the Executive team. The includes, for example, the regular 'floor talks' where Chief Executive Mark Bygraves updates staff on key issues and engages with them
- The ELEXON Board holds a series of regular briefing sessions with employees
- We produce a weekly newsletter for staff

"To maintain the expected level of service from our ever increasing user base, ELEXON has introduced and deployed an Application Performance Management tool."

BSC services in operation

Balancing Mechanism Reporting Service (BMRS)

Continuing the trend of the last few years, usage of the BMRS has continued to grow.

For 2018/19, the hits on the application programming interface (API) service nearly doubled with an average of 1.3 million hits per day; compared with a daily average of 700,000 in 2017/18.

The number of Application Programming Interface (API) users has also increased by 50%, with 22,000 unique IP addresses requesting the APIs. To maintain the expected level of service from our ever increasing user base, ELEXON has introduced and deployed an Application Performance Management tool (APM) to detect issues early and avoid incidents relating to performance or unplanned unavailability of the service.

We continue to deliver high levels of performance, with near 100% availability for key software services:

- Balancing Mechanism Reporting Agent 99.57% availability
- Energy Contract Volume Allocation Agent 99.98% availability
- BSC Service Desk 100% availability

Key statistics on Settlement during 2018/2019

Number of Settlement Runs	2553 (12 month total)
Amount of Credit held	£501,000,000 to 31 March 2019
Number of Energy Contract Volume Notifications received	2,796,565

Review against the annual budget

Summary

The audited result for the 2018/19 financial year shows total BSC expenditure outturn of £ 39.8m, contributing to a £3.8m underspend (9%) against an annual budget of £43.6m. The position against budget for the full year is summarised in the table opposite. Involvement in EMR has enabled £726,000 of BSC overheads to be defrayed.

The £3.8m underspend was mainly attributable to savings on resources and associated overhead costs, reduced activity on system transformation and fewer system changes as well as less market development activity.

Operational expenditure

The operational expenditure is £0.6m (3.3%) under budget. People costs were in line with the budget. £0.6m of savings were realised due to less spend on consultancy, associated legal costs and contingencies that did not need to be drawn down upon during the year.

Demand-led expenditure

Demand led expenditure is £1.3m (31%) under budget mainly as a result of lower than expected BSC system releases and Modifications requested by the Industry.

Contracted expenditure

Contracted expenditure for the financial year is £0.7m [4.6%] under budget, mainly due to a lower market entry activity than expected and renegotiating some of our contracts. These were partially offset by the DTN overspend due to increased volume of data being exchanged.

Result for the 2018/19 financial year

£m	Budget	Actual	Var
	18.2	17.6	0.6
Demand Led	4.2	2.9	1.3
Contracted	15.3	14.6	0.7
System Strategy	5.4	4.5	0.9
Market Development	0.5	0.2	0.3
TOTAL ELEXON	43.6	39.8	3.8

System Strategy

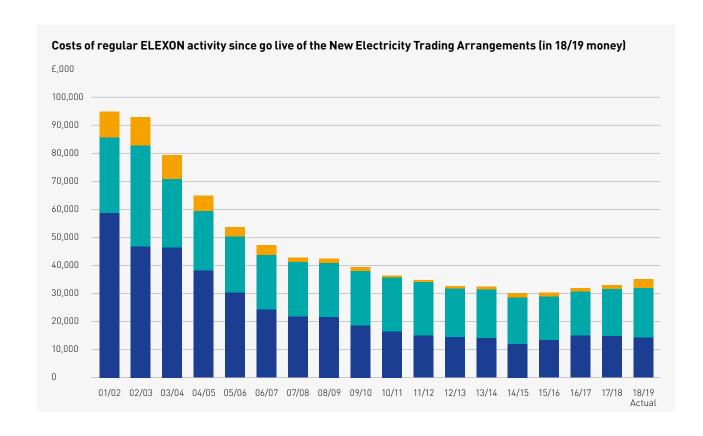
Final spend for the year is £0.9m (17%) below budget due to rephasing our system transformation project as a result delaying some costs from this financial year into next year.

Market-led development expenditure

Actual spend is £0.2m (60%) under budget. Existing BSC resources were sufficient to provide for 'horizon scanning' activities and therefore a lot of this budget was not used.

The graph below details the total costs of ELEXON's regular activity since the go-live of the New Electricity Trading Arrangements (NETA) in 2001/02. This excludes staffing and overhead costs for the Electricity Market Reform Settlement services we provide (which are fully funded by the LCCC/ESC). The figures in the graph also exclude set up costs for NETA. Adjustments for the Retail Price Index (RPI) have been applied to all years prior to 2018/19 to re-state these in 'today's money'.

In general the graph shows our success over the years in bringing our costs down. It also reflects our investment in recent years in future proofing our central systems, as well as our increased activity to support the changing electricity sector.



"The PAB conducts and administers activities to provide assurance that all participants in the BSC arrangements are suitably qualified"

Committee Summaries

Performance Assurance Board (PAB)

The PAB conducts and administers activities to provide assurance that all participants in the BSC arrangements are suitably qualified and that relevant standards of performance are maintained.

The PAB considered 193 papers, a five percent decrease from the previous year. Of these papers 75% (146) were decision papers compared to 71% (145) in 2017/18. The PAB issues invitations to BSC Parties to attend their meetings, where information suggests that there are problems with the Party's performance or that their action/inaction is affecting Settlement accuracy.

The reasons for the PAB invitations in 2018/19 are outlined in the table opposite, together with the number of invitations for the same reasons in 2017/18.

There was a reduced need for BSC Parties to attend the PAB meetings to account for their performance in 2018/19 compared with 2017/18. This is evidenced by the 46% decrease in invitations being issued as shown in the table opposite.

ELEXON monitored P272 migration for a 12 month period to April 2018 as requested by Ofgem. This activity is now part of the Change of Measurement Class checks performed as part of the BSC Audit. We will not be reporting on this in the next annual report.

Qualification activity increased during 2018/19 with 10 Qualification requests coming to PAB for approval compared with seven in 2017/18. Additionally, PAB approved five re-Qualification requests and four Change of Ownership requests.

PAB invitations in 2018/19

Issue	2018/19	2017/18
Non Half Hourly 97% standard	5	16
Half Hourly 99% standard	7	5
P272/322 P272 was the BSC Modification which proposed to make half-hourly Settlement mandatory for all Metering Systems within Profile Classes (PCs) 5 to 8 (where capable metering has been installed). P322 proposed new arrangements to migrate sites, classed as PC 5-8 with Advanced Meters installed, to Half Hourly (HH) Settlement under the P272 obligations.	0	2
Supplier Agent Market Issues	2	3
TOTAL	14	26

The Imbalance Settlement Group oversees and helps to develop the Central Volume Allocation (CVA) Arrangements. Over the year, the group has achieved the following:

- Approved three BSC Change Proposals (CPs): CP1508, CP1510, CP1513
- Recommended by majority that the BSC Panel rejected proposed changes to CoP4 for CP1505
- Approved two temporary Metering Dispensations
- Approved seven lifetime Metering Dispensations
- Approved one Trading Unit Application
- Approved 14 Non-Standard Balancing Mechanism Unit (BMU) Applications
- Approved CVA Line Loss Factors (LLFs) for use during the 2019/20 BSC Year
- Approved LLF calculation methodologies for Licensed Distribution System Operators
- Reviewed the Market Index Definitions Statement (MIDS)
- Approved Configurable Items amended as part of the November 2018 Release
- Approved Configurable Items amended as part of the February 2019 Release
- Approved the compensation methodology for one Metering System
- Provided a view on SAA (Settlement Administration Agent) rounding rules
- Commented on Generation Capacity / Demand Capacity (GC/DC) Key Performance Indicator reporting
- Approved a methodology for setting Load Periods and Sample Settlement Periods
- Recommended reduction of Continuous Acceptance
 Duration Limit (CADL) to 10 minutes
- Recommended reduction of De Minimis Acceptance Threshold (DMAT) to 0.1 MWh

The Terms of Reference for the ISG were updated to include delegated responsibility for Value of Lost Load (VoLL) and Loss of Load Probability (LoLP) Calculation Statement.

Changes introduced by P305 in 2015 mean that Short Term Operating Reserve actions can be re-priced using a Reserve Scarcity Price which is calculated from VoLL and LoLP. The Panel have now placed a responsibility on the ISG to maintain and periodically review the calculation statement methodology, thus ensuring industry scrutiny of the derivation of Reserve Scarcity Price.

Trading Disputes Committee

During 2018/2019, the Trading Disputes Committee upheld 48 Trading Disputes. The total error corrected through the Trading Dispute process is approximately £6.1m. No Trading disputes had a materiality in excess of £1m, and none were referred to the BSC Panel.

Supplier Volume Allocation Group

The Supplier Volume Allocation Group oversees and helps to develop the Supplier Volume Allocation (SVA) arrangements. To assist it, the group also has some advisory subgroups in specific areas:

- Metering Dispensation Review Group (MDRG, a joint subgroup with the ISG)
- Profiling Expert Group (PEG)
- Software Technical Advisory Group (STAG)
- Unmetered Supplies User Group (UMSUG)

Over the year, the Supplier Volume Allocation Group:

- Made decisions on seven Change Proposals
- Approved or amended Configurable Items for the February 2019 BSC Release
- Oversaw approximately 200 changes to Market Domain Data
- Allocated one new Grid Supply Point (GSP) to a GSP Group and approved a new back-up weather station for another GSP Group
- Approved new profiling Technical Product Deliverables,
 Default Estimated Annual Consumption values and
 Annual Fraction of Yearly Consumption values, following
 the PEG's annual review
- Approved new SVA Line Loss Factors (LLFs) following the annual LLF audit
- Approved two applications for extension to existing Metering Dispensations and approved one compensation methodology for a Metering Dispensation
- Approved the UMSUG's recommended changes to the Unmetered Supplies Operational Information Document
- Approved two applications for measured Central Management Systems, to be used with unmetered 'slow' charging points for electric vehicles
- Agreed an approach to processing applications for exempt supply volumes to be excluded from the gross demand data reported to EMRS



ELEXON 350 Euston Rd London NW1 3AW United Kingdom

Tel: 020 7380 4100 Web: elexon.co.uk

