Smart Energy Code

SEC End of Regulatory Year Report

2020 - 2021

Version 0.1

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1. Introduction

This End of Regulatory Year Report provides highlights of activities undertaken by the SEC Panel in delivering the operation of the Smart Energy Code (SEC), supported by the Smart Energy Code Administrator and Secretariat (SECAS) team. The report is separated into the key functional areas of Technical Operations, Change Management, Security and Privacy, Party Engagement and Committee Support. Section 9 also provides an overview of the Alternative Home Area Network (Alt HAN) due to the inclusion of Alt HAN arrangements and objectives within the SEC.

The Panel is also required, as part of the Report, to set out its evaluation of whether the SEC continues to meet the SEC Objectives. These views can be found in section 10.

2. Summary

This report covers the period 1 April 2020 to 31 March 2021, which has seen further development of the SEC arrangements and the take-up of Data Communication Company (DCC) services by industry. This year has also been impacted by the Covid-19 pandemic, and SECAS has adjusted to remote working, remote meetings and services. The SEC Panel continues to monitor the challenges and issues that have arisen as Parties adapt to increased utilisation of the DCC systems, through its various Sub-Committees and SECAS. It is the Panel's view that the SEC continues to meet the SEC Objectives.

Technical Operations headlines

The Technical Operations Sub-Committees have had another busy year. Their activities have included the testing and assessment against Live Services Criteria to inform go-live decisions associated with the enrolment of SMETS1 Device Model Combinations into the DCC system; operational support and issue resolution given the increased volume of SMETS2 installations; and assessment of modifications that have the potential to impact the technical and business architectures.

Modifications and Releases headlines

The volume of change being assessed remains high due to increased experience of the systems. 39 new modifications were initiated this year, down a little from 54 in the previous year. The Section D Review project is being concluded, with enhancements to the framework and underlying processes being rolled out. The DCC's In-Life Change team has carried out a Collaborative Design Review to establish a collaborative approach to the design phase of new SEC modifications, with the aim of reducing the time taken to deliver DCC Assessments to meet the SEC targets. Three scheduled SEC Releases were delivered, with 27 modifications implemented across the year.

Security and Privacy headlines

Security and Privacy Assessment volumes remained consistent with last year, with 65 remote assessments carried out and a further 35 self-assessments reviewed. The Security Sub-Committee (SSC) continues to carry out Commercial Product Assurance (CPA) responsibilities following the transition of responsibilities from the Department for Business, Energy and Industrial Strategy (BEIS) to the SSC in 2019, and three well attended remote engagement events were held with the National Cyber Security Centre (NCSC), BEIS, SSC and wider Industry in November 2020.

SECAS and SSC also celebrated a milestone achievement in January. It confirmed that all Device Manufacturers with SMETS2+ and Enrolled SMETS1 Devices had joined the agreement to inform the SSC of any material security vulnerabilities found on these Devices, successfully removing issues regarding compliance with the G3.20 obligation and reducing the occurrence of this being raised as an observation during User Security Assessments.

As part of its Annual Security Obligations, the SSC has also carried out several projects, including the CPA Security Characteristics Threat Mapping Review, the 8th Iteration of the SSC End-to-End Risk Assessment and the re-procurement of the User Competent Independent Organisation (CIO). The SSC

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and SMIRT took part in the BEIS Security Incident Management Exercise 'Cybershock' held in March this year. The Smart Meter Key Infrastructure Policy Management Authority (SMKI PMA) commenced a review of the SMKI Document Set which will be presented for approval in the first quarter of 2021-22.

Party Engagement headlines

Party Engagement has continued to support Parties through a variety of channels. The bimonthly newsletter remains popular, with over 825 subscribers. Small Supplier Engagement calls continue to take place to communicate relevant updates from SEC Panel meetings and facilitate direct engagement with Panel Representatives. Engagement calls with Other SEC Parties have also been arranged.

As part of our Digitalisation strategy, we launched CodeWorks last year. Since its implementation, over 470 external individuals, from SEC Parties and other authorised industry bodies, have registered. In September 2020, we hosted the CodeWorks webinar which was particularly helpful to those who had newly acceded to the SEC. We have also recently updated our CodeWorks Guidance Notes to improve the user experience.

21 SEC Parties have acceded to the SEC this year, and a further 15 have been guided through the User Entry Process. There have continued to be multiple Small Suppliers that have ceased trading and their customers transferred via the Supplier of Last Resort (SoLR) process. We have improved our involvement in the SoLR process and created Credit Cover Guidance for SEC Parties to provide clarity and ensure that they comply with their Credit Cover obligations.

Committee Support headlines

The SEC Panel and its Sub-Committees have hosted over 180 meetings this year, compared to 160 last year. Committee Support has also successfully run fully remote meetings for the year since the pandemic outbreak. The increase in meetings on the previous year has been driven by the need to facilitate key decision points for the DCC; the identification of high-profile operational issues; and extraordinary meetings to meet the SMETS1 enrolment and adoption go-live schedule. Across the Panel and its Sub-Committees, over 800 actions were captured over the course of the year of which 75% have been closed. Committee Support has been encouraging greater participation across SEC Party types at the Sub-Committee meetings.

Looking Forward

The Panel continues to horizon scan, monitoring areas that impact the SEC, and keeping abreast of changing market conditions. The Panel has focused on developing and enhancing the SEC Strategic Plan, and in December established a Strategic Working Group (SWG) to support the Panel with developing a long-term strategic approach to projects and Industry matters. The SWG membership is composed of Panel members representing each Party type and has met twice since forming.

From a SEC perspective, the significant increase in DCC operations resulting from mass rollout of SMETS2 meters and enrolment of SMETS1 Devices, continues to create challenges and opportunities for the Panel and its Sub-Committees. The workload of the Technical Sub-Committees is expected to remain high, given the anticipated level of change and decision-making required, and requirement to review the outputs of the DCC. The rate of Change Modification Proposals is not expected to die down. In addition, the SSC will need to continue to stay abreast of emerging threats, mitigating risks to preserve the integrity of the Security Architecture.

SEC Parties are continuing to face challenges, with Event of Default and SoLR cases rising. Headcount reductions faced by Energy Suppliers is also putting pressure on regulatory resources. The impact of these challenges is an expectation of greater support being provided by the SECAS Service, and a greater impetus to drive the digitalisation strategy forward.

The market as a whole is experiencing change with the introduction of price caps, the Retail Energy Code and Ofgem's review of the DCC licence arrangements. In addition, several wider industry developments such as electric vehicles, smart homes and connected devices, and the move to 5G, all

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need to be monitored in terms of their impacts on the SEC. Whilst some areas can be controlled by the SEC, several external factors continue to drive the agenda and cost.

A year into the Covid-19 pandemic, the industry has adapted to remote working and has implemented several successful tools, such as remote Privacy and Security assessments and digital documentation. The pandemic has also created extra pressures on resources, such as the ability to install meters, and will no doubt have long-term effects across the industry.

The following sections provide more detail on the activities overseen by the SEC Panel and its Sub-Committees during the last regulatory year 2020-21.

3.   Technical Operations

3.1   Technical Architecture and Business Architecture Sub-Committee (TABASC)

The TABASC met 18 times this year. The TABASC continues to provide input and support to the discussions regarding both the current and future smart metering ecosystem and has had an increased role in the modifications process, specifically in providing views to both the SEC Panel and BEIS transitional governance forums regarding the impact of proposed changes.

A key focus area for TABASC has been providing input into the DCC's proposals regarding Network Evolution to deal with the retirement of the 2G/3G network. Another area has been to evaluate the outputs of Ofgem and Elexon given the proposed changes to the Balancing and Settlement Code (BSC). In particular, the TABASC has considered the impact of Market Wide Half Hourly Settlement (MWHHS) and Meter Splitting (BSC P379) on the smart metering technical infrastructure.

The TABASC has continued to provide advice on Modification Proposals affecting the Technical Specifications, or the Technical and Business Architecture. Specifically, the TABASC has provided advice on suitable implementation and scoping for each release, amending its Terms of Reference to increase its role in defining the technical implementation of Modification Proposals within DCC Systems.

The TABASC has also kept abreast of several industry developments that are impacting, or have the potential to impact, the technical and business architectures. This has included the following:

- **Next Generation CH and Networks** – reviewing the options presented by the DCC to deal with the retirement of the 2G/3G network. This included the Minimum Viable Product (MVP) Technical Specifications, Business Requirements Document and Cost/Benefit Analysis.
- **DSP Sandpit for Network Evolution** – assessing the business case/ proposed benefits of the DCC establishing a new DSP Sandpit. This proposal was not taken forward.
- **Alerts lost during Scheduled Maintenance** – exploring options to tackle loss of Alerts during scheduled Maintenance.
- **Smart Export and the Smart Export Guarantee** - producing business process and guidance documents to help Users understand the end-to-end arrangements for the treatment of Export.

Looking forward, the TABASC will continue to assess the business requirements and technical implementation of the changes needed to support the Network Evolution programme, including changes to CH and Networks, the Data Service Provider, and the Trusted Service Provider. In addition to this, the TABASC expects to undertake work to ensure that new business models emerging within the energy market and across broader society do not result in the Smart metering architecture being circumvented. This may result in changes to the Technical Specifications or architectural models to ensure that Smart metering can integrate with new technologies or support evolving business models.

3.2   Testing Advisory Group (TAG)

The TAG met 24 times this year, maintaining its primary focus on providing SEC governance of testing and Release activities carried out by the DCC. The TAG continues to be well supported by industry, providing expertise from energy suppliers, Network Parties, shared resource providers, meter & display

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manufacturers, trade bodies, SECAS and the DCC. Members have provided significant input into testing matters, reviewing a significant volume of materials produced by the DCC to determine its readiness to implement change.

During the year, the TAG approved testing for the following SMETS1 Enrolment and Adoption activities:

- The Initial Operating Capability (IOC Aclara)
- The Middle Operating Capability (MOC Secure)
- The Final Operating Capability (FOC) Primary Release
- SMETS1 Core Uplift 1.1
- SMETS1 Uplift 1.2

This included agreeing the depth and breadth of the testing to be carried out on each release and approving test completion for Systems Integration Testing (SIT). For IOC Aclara, MOC Secure and the FOC Primary Release, the TAG also agreed the depth and breadth of Migration testing and assessed whether the Live Services Criteria had been met.

The TAG oversaw and agreed the DCC's production of the SEC Release Testing Approach Documents which form part of the Panel's SEC Release implementation documentation for the June 2020 and November 2020 SEC Releases, along with assessing and agreeing test completion for each release.

The TAG also worked with the DCC to identify and discuss the TAG's future involvement with the Network Evolution programme after a call for clarification from members. The DCC confirmed it will ensure regression testing will validate backwards compatibility of Network Evolution Communications Hubs using representative Meter installations in production and DMCs known to be problematic.

The TAG also advised SECAS on any issues they are currently experiencing with testing to feed into the new contract negotiations between the DCC and its Service Providers. The TAG identified several problem statements to be addressed by the DCC.

Looking forward, the TAG will work with the DCC to amend the current approach to Change during the design, build and test stages of development. The TAG expects to play a greater role in the governance of Pre-Integration Testing (PIT) to ensure that the depth and breadth of testing is satisfactory across all Test Phases. This should help to identify defects earlier in the development cycle and reduce the overall cost of testing and implementation.

The TAG will also provide SEC governance for the following forthcoming programmes:

- CHs and Networks
- TSP environments uplift
- Enduring Change of Supplier (ECoS)

3.3   Operations Group (OPSG)

The OPSG met 27 times this year and continues to meet twice a month, with one meeting reserved for reviewing SEC operational reports. The OPSG continues to deal with operational matters relating to services provided under the SEC, and to enable DCC and its Customers to raise and share operational matters. In light of the pandemic, the OPSG has been regularly reviewing the operational status of DCC critical services and staff. The OPSG also regularly reviews DCC Service Performance and provides updates to the SEC Panel on areas for concern, such as the missed Service Level Agreements (SLA) for CSP North.

The OPSG have carried out tasks delegated to it by the Panel, for example taking a leading role in overseeing the Superfluous Alerts issue. The DCC and Users continue to work together to identify and

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mitigate any Alerts. The OPSG endorsed the closure of the Operational Metrics Review Project, which is now being progressed through MP122 'Operational Metrics'.

The OPSG commenced engagement with the DCC regarding Network Evolution in May 2020. Since then, it has reviewed key documents such as the Project Scope, Business Requirements Document, and Cost Benefit Analysis. This engagement is ongoing as the programme develops.

The OPSG has contributed to several Releases, endorsing go-live for the June 2020, November 2020 and February 2021 SEC Releases. In addition, the OPSG approved the Live Services Criteria (LSC) for SMETS1 Middle Operating Capability (MOC) and agreed to endorse the recommendation to the Panel to add the last Initial Operating Capability (IOC) entry, Aclara Device Model Combination, to the Eligible Product Combinations List (EPCL). The OPSG also reviewed readiness for SMETS1 Final Operating Capability (FOC) Go-live and supported the DCC submission that the central services were ready for live operation. The OPSG was unable to support the addition of EPCL entries since the investigation of a possible defect was still in progress.

Other topics that the OPSG has addressed include:

- DCC Business Continuity and Disaster Recovery testing

- Major Incidents

- Adverse Weather and Planned Maintenance

- Radio Frequency (RF) Noise and Impacts to Service

Over the past year, the DCC has introduced significant changes to its operation following OPSG feedback, and the Group continues to assess these improvements and seek assurances from the DCC that learning is applied to its operational processes and systems.

3.4   CPL

Central Products List (CPL) activities have been high this year, highlights of which are included below:

Central Products List statistics	Number
CPL versions issued	69
SMETS2 Device Models added	132
SMETS1 Device Models added	51
Device Models removed	1
Functionality updates: SMETS1 CPL, November 2021 Release Technical Specification	1

An increasing number of SMETS2 Device Models have been added to the CPL, along with associated updates being made to the Firmware Information Repository (FIR), which allows SEC Parties to view firmware update and contact information for the relevant meter manufacturer.

The Plain English Mapping spreadsheet has also been updated on a regular basis to provide information relating to new SMETS1 and 2 Device Models.

The November 2020 Release introduced new technical specification functionality onto the CPL. This included adding entries for SMETS V4.3, SMETS V5.0, CHTS V1.4 and GBCS V4.0. A submission note was also added to ensure that standalone 'Auxiliary Proportional Controller' must use the Physical Device Type 'Single Element Electricity Meter'.

SECAS is developing a tool to enhance the CPL management and submission process. We will inform all SEC Parties once this tool is released.

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3.5   Network Evolution

The DCC's Network Evolution programme consists of 4 separate workstreams:

1. Comms Hubs & Networks
2. Data Service Provider (DSP) re-procurement
3. Security and Smart Meter Key Infrastructure (SMKI) evolving requirements
4. Test Automation of SEC Releases

BEIS has direct oversight over the first two workstreams as it relates to licence obligations of the DCC. In order to inform its decision on how to progress in these workstreams, BEIS has requested the SEC Panel form a view of the proposals contained in the Network Evolution Programme. Equally, as part of the Panel's duty to consider developments in services from a SEC Party perspective, the Panel are also seeking to provide input on the third and fourth workstreams.

To assist the Panel in reaching a view on the DCC's Network Evolution programme proposals, input and advice from the SEC Sub-Committees is being sought. SECAS were requested to provide support to the DCC to help deliver a coordinated approach for this wider engagement, and to ensure the required project documentation is delivered.

The DCC's Network Evolution programme has required considerable work across the Sub-Committees and the SEC Panel in shaping requirements and providing necessary challenge to the Programme's direction. Through this work we have encouraged the DCC to produce the required project documentation that will allow informed decisions to be made. This year, the DCC has published the Project Brief, Business Requirements Document, and Cost/Benefit Analysis for the Comms Hub and Network workstream and are shortly due to publish the Project Brief for the DSP Re-Procurement.

4.   Modifications and Releases

4.1   Draft and Modification Proposals

The number of modifications progressing through the framework has remained high this year, as the roll-out continues and Parties make increasing use of the arrangements. 35 new Draft Proposals were raised, and two open modifications split into two, adding to the 54 already open at the start of the year. The following table sets out the number of modifications raised, progressed and closed in the year:

Modification Status	Number
Modifications open at start of regulatory year	54
Modifications raised during regulatory year	39
New modifications raised	*35*
Open modifications split	*4*
Modifications concluded during regulatory year	43
Approved	*33*
Rejected	*3*
Withdrawn	*7*
Modifications open at end of regulatory year	50

In response to volumes, SECAS continues to implement streamlined processes, whilst ensuring due diligence is completed for each proposal. The prioritisation approach developed by SECAS and the

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DCC, and endorsed by the Panel, has been used to ensure higher-value modifications are given priority during times of constraint.

4.2 SEC Releases

27 approved Modification Proposals were implemented via SEC Releases this year:

- The **June 2020 SEC Release** contained three modifications.

- The **November 2020 SEC Release** contained 17 modifications.

- The **February 2021 SEC Release** contained two modifications.

- Five further modifications were implemented across the year via ad-hoc releases.

The June 2020 and November 2020 Release contained DCC System impacting changes arising from SEC Modification Proposals; the February 2021 Release only consisted of SEC documentation changes arising from SEC Modification Proposals and did not impact the DCC Systems.

4.3 Modification framework enhancements

In October 2020, the Panel approved the SEC Section D Review project, under which SECAS would perform a review of the end-to-end modification framework, from initiation to implementation, to understand where and how the process can be further streamlined. This work will build upon the enhanced process introduced in 2019 following the previous review in 2018. In February 2021 SECAS issued an industry consultation to support this review, seeking Party feedback on the proposed changes to the modification framework detailed in SEC Section D. The final report is due to be presented to the Panel in April 2021. SECAS is already rolling out improvements where possible, and a Draft Proposal to take forward any necessary SEC changes is proposed to be raised this quarter.

SECAS has also been investigating how the other Sub-Committees, and in particular the TABASC, can input to modifications under the Terms of Reference Review project.

The Panel had previously noted exceptionally high implementation costs being produced by the DCC for SEC modifications and sought a long-term approach that would allow the industry visibility of the costs of modifications prior to the final decision being made. The DCC and SECAS have implemented several actions to improve performance, specifically with regard to reducing the time taken to submit DCC Assessments and the implementation costs. The DCC presented an update on its performance and the associated actions to the SEC Panel in January 2021.

The DCC has also been working on an improvement action plan, and its In-Life Change team undertook a Collaborative Design Review to establish a collaborative approach to the design phase of new SEC modifications. This aims to realise a reduction in the time taken to deliver DCC Assessments to meet the current targets set out in the SEC. The DCC presented the findings from its Collaborative Design Review to the Panel in March 2021.

4.4 SEC document management

Following the introduction of CodeWorks in November 2019, this platform is now the main repository for the SEC Sections, Schedules and Appendices. SECAS will continue to enhance CodeWorks to provide a full platform for managing the SEC documentation.

4.5 Transitional Governance

In addition to Modification Proposals, other changes to the SEC arise under Transitional Governance. Throughout 2020-21, 20 BEIS- or DCC-designated changes were implemented into the live SEC, with configuration management support provided by SECAS.

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5. Security and Privacy Provisions

It has been another busy year for Security and Privacy. We continue to maintain a high level of engagement with our Sub-Committee members, stakeholders and SEC Parties, noting record attendance at industry workshops and the newly introduced security webinars. Due to remote working, we also navigated an entirely remote re-procurement process for the User CIO contract.

Privacy activity has also increased this year with the first Random Sample Privacy Assessment (RSPA) taking place in September 2020. SECAS has been working with the User IPA to agree an optimal sampling approach and threshold of Service Requests required before a RSPA takes place, which was agreed by the Panel. The DCC has also been requested to produce a Change Request evaluating the implications of providing a report of Metadata Requests. Further improvements are being made to the PCF to enable validation of operational as well as design effectiveness, of Other User processes as part of the 4th Year and subsequent Full Privacy Assessments (FPA). This will replicate the model adopted for User Security Assessments and provide further guidance regarding the process Other Users should follow to gain pre-approval for any proposed changes to their approved systems and processes used to demonstrate compliance with their SEC obligations I1.2-1.5.

Building on previous years' drive to digitalise the SEC and processes, Security and Privacy assessments continue to be carried out virtually, and interactive digital versions of the Security Control Frameworks (SCF), PCF and the Agreed Interpretations (AI) are all accessible via Codeworks and the SECAS website.

5.1 Security Sub Committee (SSC)

The SSC develops and manages the User Security Assessment documentation that SEC Parties and DCC Users require, as well as the wider requirements associated with SEC Section G 'Security', such as reviewing security-related modifications and overseeing and maintaining the Security Characteristics for the Commercial Product Assurance (CPA) Scheme.

Meetings and Assessment Activity

The SSC met 33 times this year and continues to manage a packed agenda every month. A key part of SSC's work continues to be progressing Parties through the Security Assessment process. 121 Full User Security Assessments, Verification User Security Assessments, Self-Assessments, Director's Letter and Follow-Up Assessments have been reviewed. 55 assurance and compliance statuses were set in the year, and 33 Directors Letters Approved. Virtual Assessments continue to be successfully conducted by the User CIO. These volumes are similar to last year but with an increase in self-assessments and the start of the first 4th Year FUSAs.

Other Activities

While assessment reviews for DCC assurance remain a core function of SSC, there has been an increase in activities regarding Live Services Criteria approvals for Enrolment and Adoption for the SMETS1 meter cohort released as part of MOC and FOC considerations. The SSC are provided with regular updates from the DCC regarding the different aspects of SMETS1 enrolment, including the DCC's remediation plan; CIO report updates; SMETS1 alert storms; the risks of XML signing enforcement; security testing Assurance proposals; SMETS1 Certificate issues and Penetration Testing.

In February, SECAS and SSC celebrated a milestone achievement and were finally able to confirm that all Device Manufacturers with SMETS2+ and Enrolled SMETS1 Devices have now joined the agreement to inform the SSC of any material security vulnerabilities found on these Devices. This removes the issues and delays caused regarding commercial contract negotiations and supports Suppliers in being able to achieve and maintain compliance with their G3.20 obligation reducing the occurrence of this being raised as an observation during User Security Assessments.

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As part of the transferred responsibility from BEIS for CPA monitoring, the SSC continues to monitor the progress of firmware upgrades via regular remediation plans obtained from suppliers where CPA Certificates have been withdrawn or are due to expire. The SSC is regularly presented with DCC updates on CPA certificates, CPA Remediation Plans, Prepayment Meters (PPM) Report, and a new report from the DCC on Devices in "pending" mode in the Smart Metering Inventory (SMI).

Following the conclusion of the CPA Security Characteristic (SC) Threat Mapping Review in November, SSC hosted three CPA Industry Days with support from BEIS and NCSC. The range of topics covered included a review of the issues encountered in progressing Use Cases for Device refurbishment in line with published guidance; strengthening CPA SC evidence resulting from the proposed SC changes post review; and the proposed introduction of an 'Agreed Interpretations' document to provide guidance for manufacturer and test laboratories to assist in CPA evaluations. Discussions with NCSC are ongoing to reach a conclusion on these issues and enable publication of the updated SC's, and SSC and BEIS continue to facilitate workshops and discussions with NCSC to reach a satisfactory outcome for Industry. NCSC also provided an update on Quantum Computing at the January SSC meeting.

The Post Commissioning and Anomaly Detection Threshold (ADT) Reports created last year continued to be presented by the DCC for the SSC's information and feedback. These reports monitor the effectiveness of the relevant security controls and support the SSC in their annual review and setting of the threshold figures with DCC.

Project and Procurement Activity

This year's project and procurement activity included the re-procurement of the User CIO which concluded in July. As part of meeting its Annual Security Obligations under the SEC, the SSC also completed the 8th Iteration of the End-to-End Risk Assessment and the CPA SC Threat Mapping Review, which included a workshop between SSC, BEIS and NCSC to support the drafting of the new CPA SC's for Standalone Auxiliary Proportional Controller (SAPC).

5.2   Security Management Key Infrastructure and Privacy Management Authority (SMKI PMA)

The SMKI PMA oversees the effectiveness of the SMKI Document Set and the SMKI Services. The SMKI PMA met 11 times this year and facilitated additional working group meetings to discuss SMETS1 Symmetric Keys and SMKI Recovery Testing.

SMETS1 Enrolment and Adoption has continued to impact SMKI PMA activities this year. The DCC provided updates on different aspects of SMETS1 enrolment including the DCC's Initial Operating Capability (IOC)/Middle Operating Capability (MOC) MDS Remediations; Active and Monthly Dormant Migration Process, CIO report updates, Negative Testing, Home Area Network (HAN) Control Assurance, MOC Morrison Data Services (MDS) Cohort, and MOC Secure Remediations. The SMKI PMA also contributed to the SMETS1 Final Operating Capability (FOC) go-live, monitoring the DCC provision of the FOC Certificate Policy, FOC Certificate Practice Statement, and FOC t-Scheme audit.
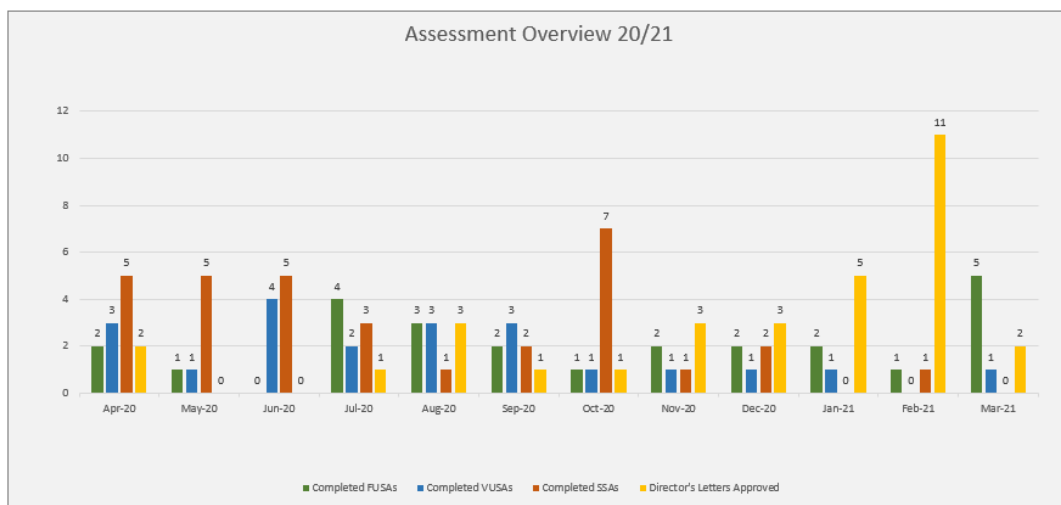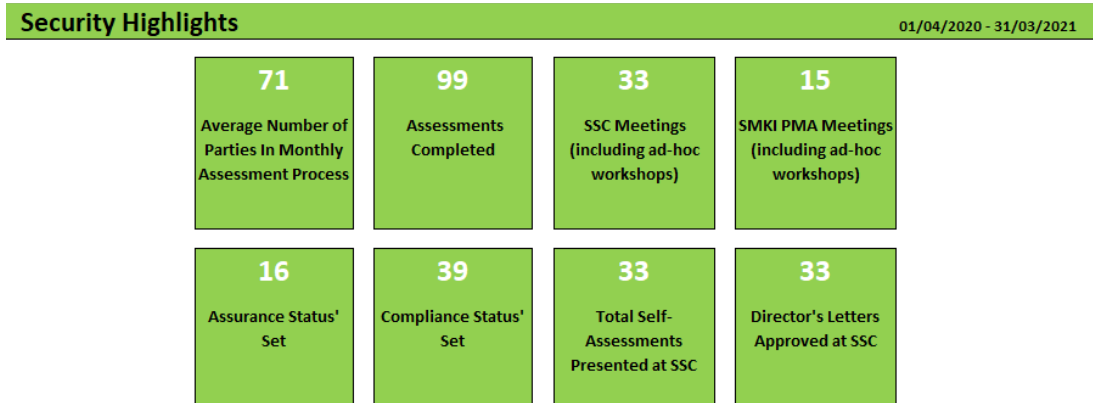
The SMKI PMA carried out the SMKI Recovery Event Exercise, and gave SECAS, DCC and Suppliers actions to investigate whether the scenarios are fully accounted for in guidance documents.

The SMKI PMA determined the assurance status of the DCC in relation to SMKI Services following the outcome of the SMKI tScheme audit undertaken by the DCC. Members agreed to set the status to "approved with caveats" as per SEC Appendix C Section 4.7.

The SMKI PMA has also been working with the DCC on the Trusted Service Provider (TSP) re-procurement and is now receiving monthly updates. The SMKI PMA has also provided the DCC with their Security perspective on the Network Evolution programme.

The SMKI PMA has been involved with improving the SoLR event processes. Following a SEC Panel discussion, the SMKI PMA Chair proposed changes to the governance procedures to keep Prepayment Energy Consumers safe, which were agreed by the SMKI PMA pending agreement with the Authority.

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The SMKI PMA also commenced the SMKI Document set review, which is being conducted by the SMKI PMA specialist, Recommended changes agreed with the SMKI Project Sub-Group will be presented to the SMKI PMA for approval in the first quarter of 2021-22.

Security Highlights   01/04/2020 - 31/03/2021

71	99	33	15
Average Number of Parties In Monthly Assessment Process	Assessments Completed	SSC Meetings (including ad-hoc workshops)	SMKI PMA Meetings (including ad-hoc workshops)
16	39	33	33
Assurance Status' Set	Compliance Status' Set	Total Self-Assessments Presented at SSC	Director's Letters Approved at SSC

Assessment Overview 20/21

6. Party Engagement

6.1 Market Entry and Exit

The SEC Panel oversees applications from organisations wishing to become a SEC Party and manages the exit of Parties under SEC Section C2.3. In 2020-21, 21 new Parties joined the SEC, with nine Parties leaving through expulsion and a further nine Parties withdrawing from the SEC. The Party count now stands at 335, representing 263 Voting Groups, as illustrated in the below table and pie chart.

Party Category	Number of SEC Parties
Electricity Networks	28
Gas Networks	21
Large Suppliers	29
Small Suppliers	130
Other SEC Parties	126
DCC	1
Total	**335**
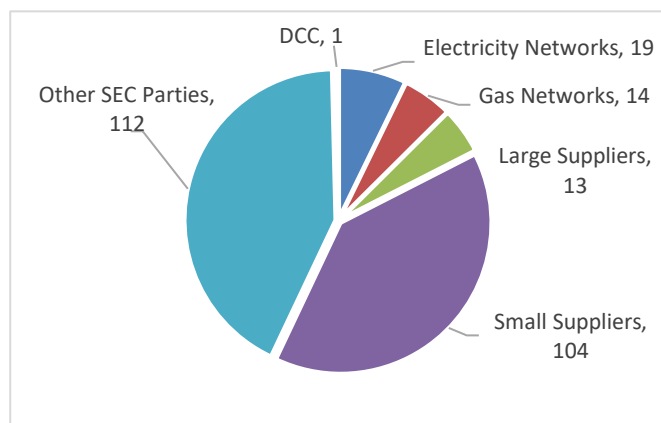
Figure 1: *Current Voting Groups by Party Category*

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6.2 User Entry Process

SEC Section H1 sets out the User Entry Process (UEP) that Parties must complete before they can access DCC Services as a DCC User. In 2020-21, 15 Parties, all Small Suppliers, successfully completed this process. The total number of Parties that have completed the UEP now stands at 127.

6.3 Defaults, Disputes and Supplier of Last Resort

In 2020-21 there were nine instances where Parties entered into an Event of Default and were subsequently expelled from the SEC. There were eight Supplier of Last Resort (SoLR) scenarios.

We have noted a continued increase in the number of Small Suppliers who have ceased trading, and/or failed to pay their DCC charges. SECAS has continued to follow and refine its Events of Default process, as common causes have been observed and effective strategies for managing these identified.

We have produced Credit Cover guidance which aims to help SEC Parties understand and comply with their Credit Cover obligations under SEC Section J.

SECAS has continued its work to facilitate the SoLR process to ensure that where issues arise, lessons learned are implemented to prevent reoccurrence. SECAS will be working with industry to compile a checklist for gaining Suppliers to follow when they become the SoLR, and is also working with Ofgem, the DCC and SECAS on improved procedures to ensure that the process runs as smoothly as possible.

6.4 Engagement

Throughout 2020-2021 SECAS has introduced several digital solutions to improve its services, increase engagement and benefit SEC Parties by encouraging greater transparency.

6.4.1 SECAS Webinars

Short topic-focused webinars have proven to be a useful tool to keep SEC Parties informed about relevant updates and to engage with SEC Parties remotely. SECAS hosted eight live webinars in 2020-2021. The most popular was 'Introduction to the SEC – back to basics' which is aimed at new employees or newly acceded Parties to the SEC. Figure 2 below details the number of attendees per webinar.
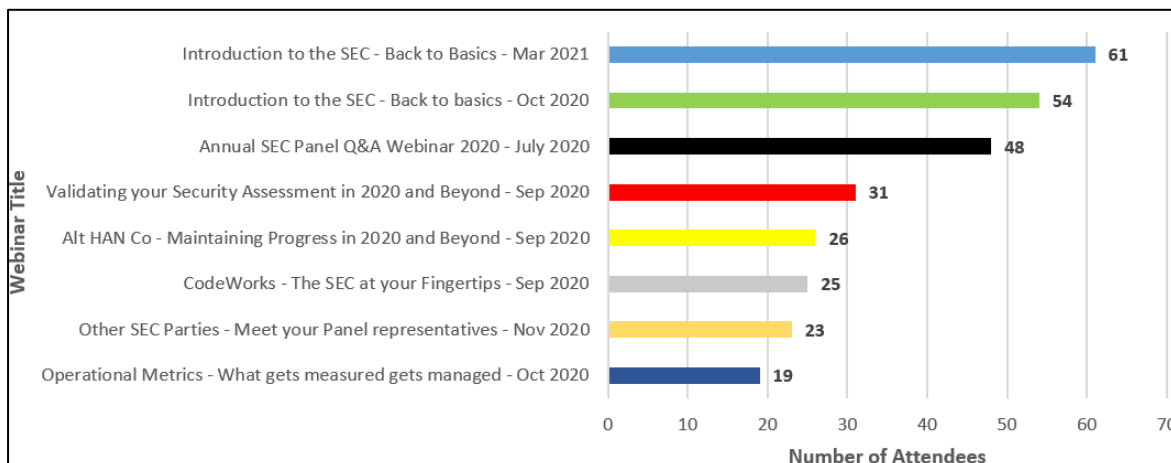

Figure 2: Number of attendees by webinar hosted in 2020-21

The Annual SEC Party Engagement Day was held as a webinar in July 2020, rather than an in-person event, for the first time. The SEC Panel Chair, Peter Davies, presented an overview of the previous year's highlights and noted the challenges arising from the impact of COVID-19. Parties had the opportunity to put their questions to the SEC Panel. It was a great success and kept up with the previous year's record-breaking attendance with over 50 attendees.

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The webinars have enabled SECAS to improve its reach and engage with SEC Parties who would not usually attend in-person events. 90 different SEC Parties attended the webinars over the past year, an increase of 20% on last year's total attendance of 75 Parties.

Throughout the live webinars SEC Parties have been encouraged to ask questions, giving SECAS and external speakers the opportunity to provide instant feedback. External stakeholders supporting the programme have included the DCC, BEIS, Ofgem, Smart Energy GB, and Alt HAN. This has helped keep Parties up to date with industry developments during this challenging time. SECAS has also obtained valuable feedback from attendees by asking poll questions, with 95% of all webinar attendees reporting that the webinars fully or mostly met their expectations.

Video presentations and slides from each webinar are published for SEC Parties on the website here.

6.4.2   SEC Party Engagement Calls

SECAS has continued to engage with Small Suppliers, monthly. In October 2020 we also commenced monthly engagement calls with Other SEC Parties. These calls provide an opportunity for Parties to share their thoughts and feedback with their respective SEC Panel representatives. SECAS presents updates from the Change Board, highlighting any Modifications which are particularly relevant to the Party group. The DCC and Alt HAN Co also attend to provide regular updates.

SECAS has recently confirmed a regular opportunity to engage with Electricity Networks by presenting a quarterly update at the Smart Meter Steering Group from May 2021. This will provide an extra route for Electricity Networks to be kept informed of relevant updates and enable SECAS to gain insight and explore potential solutions to the challenges experienced by Electricity Networks.

6.4.3   SEC Newsletters

Our bimonthly SEC Newsletter remains popular with over 825 subscribers. It's a great way for Parties to keep up to date with industry developments and events, and for SECAS to request feedback. Over the past year SECAS has developed relationships with the engagement teams at the DCC, BEIS and Smart Energy GB who feed into the newsletter to reduce duplication and align messages to Parties.

6.4.4   Website Improvements

SECAS has introduced several new website features to improve navigation and ease of use, including a glossary, frequently asked questions, open industry consultations page and webinar page. We have also introduced simple online versions of the Accession Application, Change of Party details and SEC Panel / Sub-Committee Nomination forms.

We have also updated our Guidance Notes, to be written in concise Plain English, to help SEC Parties familiarise themselves with the various processes and procedures necessary to meet their obligations under the SEC.

6.4.5   CodeWorks - The Digital SEC

Since its implementation in September 2019, CodeWorks now has over 470 registered SEC Parties and other authorised industry body users. In September 2020, SECAS delivered a webinar to raise awareness of the benefits of using CodeWorks and demonstrate how to use the main features.

### 6.4.5   Customer Satisfaction Survey

This year the SEC Panel advised that the Customer Satisfaction Survey should not go ahead recognising the time constraints on Parties exacerbated by the pandemic. However, SECAS welcomes any Party feedback to inform its continuous improvement programme.

7.   Committee Support

The Committee Support team has facilitated 181 meetings for the SEC Panel, SECCo Board and its Sub-Committees, compared to 160 last year. The increase has been driven by the need to

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facilitate key decision points for the DCC, the identification of high-profile operational issues, and extraordinary meetings to meet the go-live schedule. Across all Sub-Committees, over 800 actions were captured over the course of the year. Of these new actions, 75% have been closed.

The team has been encouraging greater participation across SEC Party types at the Sub-Committee meetings and has also successfully run fully remote meetings for the year since the pandemic outbreak. Committee Support has undertaken a Continuous Improvements project to improve our services, both internal and external. This has included moving to a more accessible meeting paper platform and digitising the elections process. Committee Support has also been investigating tools which can make remote meetings more interactive and engaging, such as MS Teams extensions.
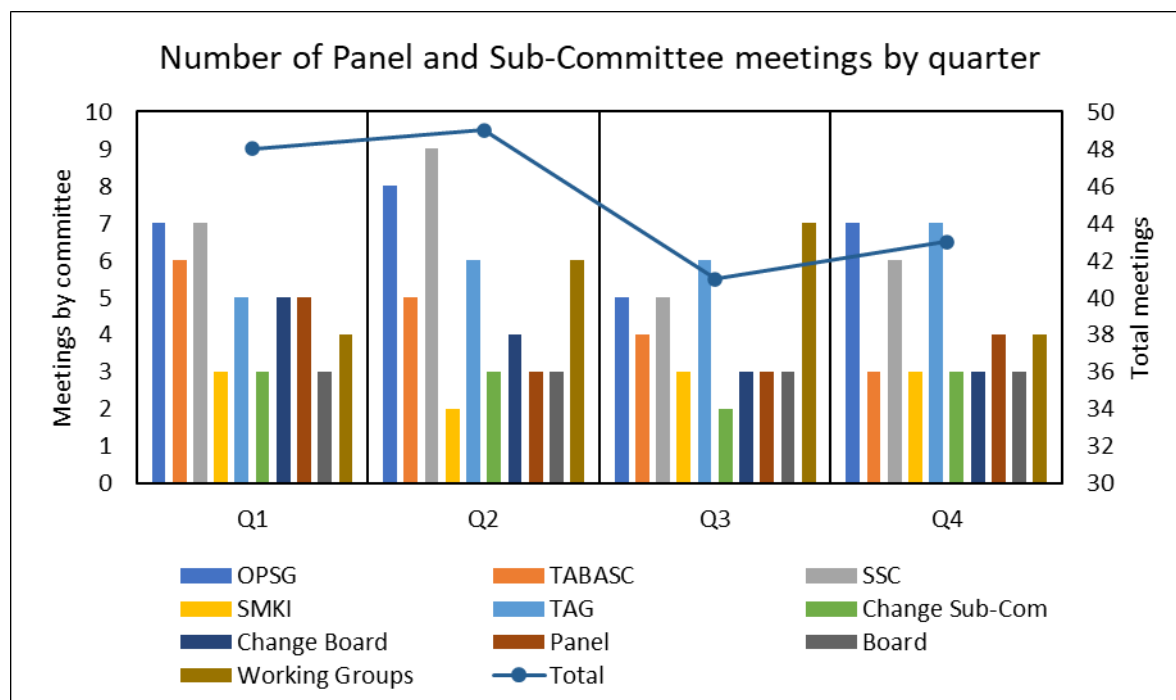
8.   Smart Metering Device Assurance (SMDA)

Following approval of Modification MP111, the SMDA Scheme now falls under the SEC and transition activities have been carried out. The SMDA Board is now meeting as the SMDA Sub Committee (SMDASC), and has met twice so far, reporting on its activities to SEC Panel. The SMDA Board is still meeting separately for items related to SMDA Co Ltd which is due to be wound up this quarter. A key activity so far has been the successful appointment of a new Test House, Critical Software, to take over from NMi, ensuring continuity of testing services for SEC Parties.

9.   Alt HAN Activities

The Eighth General SEC Objective relates to activities of the Alternative HAN Forum (the "Forum") on the establishment and operation of Alternative HAN Arrangements. Section Z 1.3 sets out the objectives of the Forum and provides the framework within which all Alt HAN activities must operate.

The 2020-2021 Regulatory Year saw the continued operation of the Forum and a steady increase in the pace of activities following the launch of the Alt HAN Programme. The Alt HAN Forum have made significant progress this year towards Alt HAN Arrangements and the figure below outlines the key activities during 2020-21.

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10. Commentary Regarding Activities

The Eighth General SEC Objective relates to activities of the Alternative HAN Forum (the "Forum") on the establishment and operation of Alternative HAN Arrangements. Section Z 1.3 sets out the objectives of the Forum and provides the framework within which all Alt HAN activities must operate.

The 2020/2021 Regulatory Year saw the continued operation of the Forum and a steady increase in the pace of activities towards technology proving and readiness for the launch of Alt HAN services. The Alt HAN Forum have made significant progress this year towards Alt HAN Arrangements and the figure below outlines some of the key activities during 2020/21:

April - June	July - September	October - December	January - March
• Alt HAN Co. transitioned to full remote working due to Covid-19	• Alt HAN Supplier Contract released to Energy Suppliers for signature	• The Forum approved a re-plan and BEIS approved associated changes to Joint Industry Plan (JIP)	• Live Customer Trials started with Participating Energy Suppliers
• Target Operating Model implementation team established	• Alt HAN Inventory of candidate premises made available to Supplier Contract signatories	• Started the first phases of integration testing, and solution testing and device assurance.	• Successfully completed first substantive cycle of integration testing.
• The Forum approved V1.0 Safe Launch Approach	• Initial indicative device order forecasts submitted by Energy Suppliers	• Customer Operations Director and Technical Director appointed	• Alt HAN Co. continue to make good progress on the Target Operating Model, and recruitment of the senior management team
• The Forum approved revised approach to On Premise Trials due to the impact of Covid-19	• Market Sizing for Alt HAN Candidates completed	• Accession to the Alt HAN Supplier Contract reached c. 70% coverage by market share	• The Forum progressed the commercial and technical evaluation of its two competing technology vendors
• The Testing Sub-Group was established under the Forum to provide focus on testing related activity with Energy Suppliers	• Engagement with Energy Suppliers ramped up to promote awareness and operational readiness	• Alt HAN Co. acceded to the SEC as an "Other" SEC Party	• The Forum approved the start of the next phase of integration testing
		• The 21/22 budget was approved by Alt HAN Co Board and Forum and submitted to DCC	

11. Delivery of SEC Objectives

With regard to the foregoing activities and achievements for the Regulatory Year 2020-21, the SEC continues to meet the SEC Objectives as outlined in the table below.

Objective	Status	Notes
First General SEC Objective - to facilitate the efficient provision, installation, and operation, as well as interoperability, of Smart Metering Systems at Energy Consumers' premises within Great Britain.	✔	This General SEC Objective continues to be met through activities that the Panel and the Sub-Committees undertake, including: • Supporting DCC Release activities through the Panel, OPSG and TAG decision-making activities; • Managing the resolution of issues through the OPSG; • Sub-Committees continually monitoring the installation, operation and interoperability of Devices, reporting any issues to the Panel as required; • Supporting Draft and Modification Proposals through the process, with oversight from the Panel and the Change Sub-Committee and continuous process improvement; and • SECAS and the Panel Chair attending the BEIS Groups and keeping the Panel and Parties appraised of developments through the monthly Transitional Governance Update paper. Consultation responses have also been submitted where appropriate from the SEC Panel or Sub-Committees.
Second General SEC Objective - to enable the DCC to comply at all times with the General Objectives of the DCC (as defined in the DCC Licence), and to efficiently discharge the other obligations imposed upon it by the DCC Licence.	✔	Where there is a dependency on the SEC operations for the DCC to comply with its Licence, the Panel has acted promptly and proactively to ensure that it achieves its responsibilities in a consultative manner, whilst not frustrating the process for the DCC to meet its obligations. The majority of the DCC's obligated reporting has been delegated by the Panel to the OPSG for review, with any issues being highlighted to the Panel as required. DCC progress in delivering against its obligations is monitored through an update from the DCC Panel Member provided at SEC Panel meetings, regular meetings with the DCC, and monitoring of consultations, activities and updates at industry meetings.
Third General SEC Objective - to facilitate Energy Consumers' management of their use of electricity and gas through the provision to them	✔	Energy Consumers are now able to access data derived from their electricity and gas usage following DCC Go-Live and take up of DCC Services. The impacts on Energy Consumers is monitored by the Panel and supplemented by the consumer representation of Citizens Advice at both the Panel and SECCo Board meetings. SECAS has engaged closely with Citizens Advice, providing them with tailored information on modifications and other areas of

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of appropriate information by means of Smart Metering Systems.		interest to enable them to be more involved in consumer impacting areas rather than across the whole smart arrangements.
		SECAS has strengthened its relationship with Smart Energy GB to share insight with SEC Parties at regular engagement events, including the development of their marketing campaign and the impact this has had on the habits of consumers and their energy usage.
Fourth General SEC Objective - to facilitate effective competition between persons engaged in, or in Commercial Activities connected with, the Supply of Energy.	✓	The development of the overall market design and DCC Services under the SEC, together with the technical and security framework, support the aim to facilitate effective competition under this objective.
		All Party Categories are represented on the SEC Panel and Sub-Committees to ensure their differing needs are represented.
		Information is available on the SEC Website for all Parties, regardless of Party Category. The introduction of CodeWorks enables Parties to view only the obligations relevant to their SEC Party type.
Fifth General SEC Objective - to facilitate such innovation in the design and operation of Energy Networks (as defined in the DCC Licence) as will best contribute to the delivery of a secure and sustainable Supply of Energy.	✓	Network Parties' participation is integrated into the SEC governance entities as well as their rights as SEC Parties.
		Continued involvement of Network Parties in the achievement of the Transition Objective and the evolution of the SEC, alongside liaison with other Industry Codes, ensures it continues to support this objective.
		SECAS continue to engage with the Network Parties, ensuring that they are fully appraised of new SEC content and their implications.
Sixth General SEC Objective - to ensure the protection of Data and the security of Data and Systems in the operation of this Code.	✓	This SEC Objective continues to be met, with the SEC security requirements and architecture ensuring appropriate protections, responses and remediations are in place.
		The SSC has continued to develop relevant processes and procedures throughout the year to support the requirements set out within the SEC. The SSC has formalised and substantiated the process for tracking, monitoring and remediation of Users' non-compliances.
		The SSC monitors Devices with either conditional CPA or those Devices with certificates that are approaching expiry or have been withdrawn. The SSC has instructed the removal of Devices from the CPL that have been unable to upgrade to more current firmware versions.
		SECAS has implemented 2-Factor authentication for its file sharing platform which adds an additional layer of security in the sharing of assessment documentation.
		The Panel reviews its Panel Information Policy on an annual basis to ensure it remains fit for purpose.
		SECAS has built a relationship with and will work alongside the Information Commissioner for data protection activities. The Panel has retained the obligation for data protection rather than delegating to a

		Sub-Committee and has set up a Memorandum of Understanding with the Information Commissioner to enable information sharing.
Seventh General SEC Objective - to facilitate the efficient and transparent administration and implementation of this Code.	✓	The SEC Panel and SECCo Board have been established and have demonstrated their commitment to this objective through undertaking the Panel Duties in accordance with the Panel Objectives as laid out in the SEC. SECAS supports this General Objective through issuing communications to SEC Parties, including providing updates on Sub-Committee activities, modifications going through the process, and the SEC Panel budget. Amendments to the SECAS services over the past year have included: the introduction of webinars to expand our reach and engagement with SEC Parties throughout the pandemic; the introduction of monthly engagement calls with Other SEC Parties; and the use of Virtual Assessments for Security and Privacy assessments.
Eighth General SEC Objective - to facilitate the establishment and operation of the Alt HAN Arrangements.	✓	The Alt HAN Arrangements are detailed in Secton Z of the SEC, setting out the roles and responsibiltiies of the Alt HAN Forum and Board. These bodies continue to be well-supported by energy suppliers, and continue to operate effectively as decision-making entities. The work of the Forum is supported by a total of six Sub-Groups. 2020/21 has seen strong progress in establishing the operational capabilities required to the deliver Alt HAN services, with the first services (access to the Alt HAN Inventory) going live for onboarded energy suppliers who have acceded to the Alt HAN contract. It has also seen significant progress in the competitive process to develop and prove the Alt HAN technology solutions, through lab testing and on-premise trials – and looking ahead to field trial and full end-to-end integration testing. While Covid-19 has inevitably impacted a number of activities, progress has been maintained and Alt HAN is in a strong position to meet its revised target of "Safe Launch" in July 2021. This has been matched by the increasing number of energy suppliers engaged in Alt HAN activities and signed up to the contract for Alt HAN services. Alt HAN has also made significant progress in making the transition from a delivery programme to an enduring operational business. A number of leadership roles have been recruited under Managing Director, Paul Cooper, and detailed work continues to implement the associated Target Operating Model and organisational culture. Alt HAN has also secured its own central London office hub to support flexible working as lockdown restrictions are eased.
Transition Objective - the efficient, economical, co-ordinated, timely, and secure	✓	SEC Section X outlines the transitional arrangements. Progress and outputs of the Transition Working Groups are monitored on a monthly basis and Panel and SECAS operations have been fully prepared to receive updated Code content and SEC Subsidiary Documents upon designation.

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process of transition to the Completion of Implementation.		
Charging Objectives - First Relevant Policy Objective.	✓	The first Charging Methodology in SEC Section K meets the aim of the objective by applying uniform charges to Domestic Premises.
Charging Objectives - Second Relevant Policy Objective.	✓	The Charging Methodology has been implemented within the SEC and the Charges applicable within the reporting period facilitate the implementation of the DCC Services reflective to the DCC costs.
Charging Objectives – Third Relevant Policy Objective.	✓	The first Charging Methodology has been implemented within the SEC and the Charges applicable within this reporting period facilitate the implementation of the DCC Services reflective to the DCC costs.

✓ Continues to meet Objective

✓ Will be met subject to the introduction of future SEC content

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