P308 'Alternative security product for securing credit under the BSC'

This Modification proposes to introduce an alternative method for securing credit under the BSC. This product would be provided centrally, and Parties would be able to use it in place of the existing requirements to provide Credit Cover individually.

ELEXON

Phase

Initial Written Assessment

Definition Procedure

Assessment Procedure

Report Phase

Implementation

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Contents

1	Summary	3
2	Why Change?	5
3	Solution	7
4	Areas Considered by the Workgroup	8
5	Progression	10
6	Workgroup External Support	11
7	ELEXON Analysis	14
8	Workgroup's Discussions	16
9	Other Credit Impacting Modifications	20
10	Next Steps	21
Appendix 1: Workgroup Details		22
Appendix 2: Glossary & References		24

Contact

Elliott Harper

020 7380 4302

elliott.harper@elexon.co.uk

About This Document

This document is the P308 Workgroup Report, detailing P308, the work completed to date, and the discussions of the Workgroup.

There are six parts to this document:

- This is the main document. It provides details of Modification, the areas considered by the Workgroup, the progression of the Modification and the Workgroup discussions and conclusions.
- Attachment A contains the requirements INDECS used as part of its contract to provide support to the Workgroup relating to P308.
- Attachment B contains the catastrophic loss analysis produced by ELEXON to demonstrate the effect of a medium sized Supplier defaulting.
- Attachment C contains a six-month review of P306.
- Attachment D contains a six-month review of P307 and P310, with a one year review of P306.
- Attachment E contains a one-year review of P307 and P310, with additional analysis on P306.

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1 Summary

Why Change?

Current credit arrangements require BSC Parties to lodge credit to cover Trading Charges incurred over the preceding 29 days so that, should it default, there is sufficient collateral available to pay the debts.

Parties currently provide credit following BSC Section M 'Credit Cover and Credit Default', which allows Parties to lodge such credit as cash, a Letter of Credit (LoC), or an approved insurance product.

The Proposer believes that in some cases, the level of credit held under the BSC is exceptionally high, beyond the risk level that Parties are likely to incur and is therefore inefficient.

Solution

The solution suggested by the Proposer would introduce an alternative security product that would be used in place of using cash or letters of credit under the BSC.

Areas Considered by the Workgroup

The areas considered by the Workgroup relates to the Terms of reference that the Workgroup worked to during its assessment of P308. The Workgroup was required to determine the type of security product that should be implemented along with the requirements that such a security product should have. It was also required to look into the update that an alternative product should have and how such a product would fit into the BSC arrangements.

Progression

P308 was raised by Eggborough Power on behalf of Energy UK on 4 June 2014, from which point five Workgroup meetings have been held to develop a solution and discuss the progression of the Modification. In order to answer all of the questions that the Workgroup was required to consider, it required external expert support and hence such external support was procured.

Workgroup External Support

ELEXON procured, via competitive tender, external expert support on behalf of the Workgroup through INDECS Consulting. INDECS provided the Workgroup with guidance on insurance services and acted on behalf of the workgroup to engage with the financial industry to devise an insurance product suitable to be used under the BSC. ELEXON halted the work of the insurance consultant on 9 June 2016 as the costs of progressing work to develop a solution that would not, on its own, solve the issue identified were escalating.

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ELEXON Analysis

ELEXON conducted analysis to demonstrate the value of cover for a catastrophic loss product that may be required for a defaulting Party that would not be covered through other regulatory intervention means.

For the fifth Workgroup meeting, ELEXON presented analysis that depicted the value of losses through unpaid Trading charges that have been unrecoverable since 2001. This analysis was termed the Supplier Default analysis.

Workgroup's Discussions

A summary of some key Workgroup discussions is detailed in this section of the P308 Workgroup Report. These discussions related to:

- Intervention points;
- INDECS work following intervention points;
- The P308 solution in addition to intervention points;
- The issue of moral hazard,
- Actions placed on ELEXON during the Workgroup stage;
- The Workgroup Report documenting the P308 work to date; and
- Further credit analysis.

Other Credit Impacting Modifications

The Workgroup requested that detail be provided of other Modifications that have impacted Credit, the issues that such Modifications addressed and the overall impacts that these have had on the levels of Credit lodged in the market. ELEXON has detailed he impacts of other credit impacting Modifications.

Next Steps

Following the delivery of this report to the Proposer of P308 for decision on progression of the Modification, it will also be submitted to the Workgroup members for information. ELEXON will liaise with the Proposer to determine whether the Workgroup's view that P308 should be withdraw should be realised.

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What are the credit arrangements?

Under the current BSC arrangements, payments by Trading Parties for Trading Charges arising on any particular Settlement Day are typically made 29 calendar days later. Thus, at any given time, Parties may have debts (or be due payments) for Trading Charges incurred over the previous 29 days. Each Party is required to lodge Credit Cover to cover this period, to ensure that, should it default, we have sufficient collateral available to pay off its debts. Otherwise, the debts are shared across all other BSC Parties according to their Default Funding Share.

The BSC does not stipulate the amount of Credit Cover that Parties must provide. Instead it is left to Parties to decide on the level of cover that they wish to provide.

We perform a credit check process every half hour to ensure that each Party's accumulated debt (their Energy Indebtedness) over the 29 day period does not exceed the amount of Credit Cover they have provided. If a Party has insufficient funds lodged to cover this debt, it will receive a Credit Default notice. Therefore, whilst the Party determines the level of Credit Cover that it must lodge, there is the consequence of Credit Default if it does not, or cannot lodge enough Credit.

Credit Guidance Notes

More detail on **Credit Cover** and **Credit Default** can be found in the respective Guidance Notes available on our Credit webpage.

What is Credit Default?

A Party will receive a default notice if its Credit Cover Percentage (CCP) (the ratio of its Energy Indebtedness compared to the level of Credit Cover lodged) exceeds 80%. If a Party breaches this threshold then it will be given a period of time to investigate the default, in case there are any errors in the data. Normally the Party will lodge additional Credit Cover to bring its CCP below 80% and exit the process within the specified timescales. If it does not, it will enter Credit Default, which can have significant consequences for the Party.

Upon entering Credit Default, the Party's situation is reported to all other participants via the Balancing Mechanism Reporting Service (BMRS). Furthermore, if its CCP goes over 90%, any Energy Contract Volume Notifications (ECVNs) or Metered Volume Reallocation Notifications (MVRNs) that would increase the Party's Energy Indebtedness will be refused or rejected. This will impact both the Party in Credit Default and the relevant counterparties.

How do Parties currently provide Credit Cover?

BSC Section M 2.1.1 currently provides two means by which Parties can lodge Credit Cover:

- Parties can lodge **cash** directly; or
- Parties can submit a **Letter of Credit** or **Approved Insurance Product** valid for an initial period of not less than three months and meeting the requirements of BSC Section M2.2.

A Party may lodge a combination of both, which can include multiple Letters of Credit, to meet their Credit Cover requirements.

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Parties are required to lodge Credit Cover on an individual basis i.e. a Party would lodge Credit Cover only to cover its own Energy Indebtedness, and would not count towards any other Party's cover. Furthermore, Parties need to lodge sufficient cover to ensure that their CCP remains below 80% to avoid entering Credit Default. This means that they need to lodge Credit Cover amounting to at least 125% of their maximum likely Energy Indebtedness. Parties often lodge more than required to keep their CCP lower still.

What is the issue?

The Proposer considered that the level of credit held under the BSC is in some cases exceptionally high, and beyond the actual risk that Parties are likely to incur. This is in part due to Parties needing to individually lodge funds to cover their own positions. This is further compounded because the BSC requires each Party to lodge more than is actually required to cover their indebtedness in order to ensure they do not breach the thresholds for entering Credit Default. The Proposer noted that credit lodged under the BSC appears to cover a large part of the "tail risk" (i.e. events with a very small probability of happening) where the largest losses occur but, in terms of probability, are very unlikely. For instance, as mentioned previously, each Party is required to lodge Credit Cover to the amounting to at least 125% of their maximum likely Energy Indebtedness. However, it is unlikely that under normal operational circumstances, this level of cover would be called upon by a Party not paying its Trading Charges.

The Proposer believes that requiring Parties to provide Credit Cover on an individual basis is inefficient, as it results in significant sums of excess money being lodged as Credit Cover. This can be a burden for Parties in the current financial climate, especially smaller ones. They believe it would be more efficient to provide a single central security product that could cover all Parties, which would remove a lot of the excess credit that results from the current BSC arrangements.

The Proposer notes that the trade association Energy UK has carried out some initial analysis with its members, the insurance broker Marsh and ELEXON to develop alternative security products as an alternative form of cover under the BSC. They believe that this work should now be taken forward and such a product introduced under the BSC.

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3 Solution

Proposed solution

This Modification proposes to introduce an alternative security product as an alternative method for securing credit under the BSC. This would be provided centrally, and would allow Parties to use this product in place of the existing requirements to individually provide cash and/or a LoC as Credit Cover.

The Proposer noted that Energy UK has carried out some initial analysis with its members, the insurance broker Marsh and ELEXON to identify the potential for developing alternative security products as an alternative form of cover under the BSC. They believe that this work should be built on and taken forward under P308 to introduce such a product under the BSC.

The Workgroup was required to to consider the most suitable product to introduce into the BSC, which may require it to undertake some analysis to determine the suitability and cost-effectiveness of such products.

Applicable BSC Objectives

The Proposer initially considered that P308 would better facilitate **Applicable BSC Objective (c)**.

At the time of raising P308, the Proposer believed that introducing the facility for an alternative security product within the BSC would improve competition and reduce costs incurred by Trading Parties, as it would reduce the levels of excess credit that Parties are required to lodge upfront and replace it with a single central fund.

Interactions with P306 and P307

This Modification was raised alongside two other Modifications relating to the credit arrangements. However, while these Modifications all looked into the credit arrangements, each looked at a different aspect of the process and proposed mutually independent solutions. To summarise, the three Modifications were:

- P306 'Expanding the definition of a 'Letter of Credit' to include regulated insurance companies' proposed to allow individual Parties to obtain a LoC from a regulated insurance company that is capable of providing security of a similar level and form as that provided by a bank.
- P307 'Amendments to Credit Default arrangements' proposed to amend the timings, triggers and thresholds in relation to Credit Default, including adjusting the thresholds for entering Credit Default, extending the duration of the Query Period and reviewing the processes around the Cure Periods.
- P308 'Alternative security product for securing credit under the BSC' (this proposal) proposed to introduce a centrally provided alternative security product as an alternative method for securing credit under the BSC, which Parties could use in place of the existing requirements to provide Credit Cover individually.

What are the Applicable BSC Objectives?

(a) The efficient discharge by the Transmission Company of the obligations imposed upon it by the Transmission Licence

(b) The efficient, economic and co-ordinated operation of the National Electricity Transmission System

(c) Promoting effective competition in the generation and supply of electricity and (so far as consistent therewith) promoting such competition in the sale and purchase of electricity

(d) Promoting efficiency in the implementation of the balancing and settlement arrangements

(e) Compliance with the Electricity Regulation and any relevant legally binding decision of the European Commission and/or the Agency [for the Co-operation of Energy Regulators]

(f) Implementing and administrating the arrangements for the operation of contracts for difference and arrangements that facilitate the operation of a capacity market pursuant to EMR legislation

(g) Compliance with the Transmission Losses Principle

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4 Areas Considered by the Workgroup

In this section we highlight areas that have been considered to date during the Assessment Procedure for P308. ELEXON previously recommended that the areas below form the basis of a Workgroup's Terms of Reference, supplemented with any further areas specified by the Panel. Further detailed consideration of the points that the Workgroup discussed can be found in section eight (Workgroup's discussions) of this paper.

What alternative products should be used?

The Proposer noted that an alternative security product should be used, but did not specify a particular product or its characteristics. Therefore the Panel required that the Workgroup consider the most appropriate product to use. In particular the Workgroup considered the following areas:

- Determined if such a product is necessary for the BSC arrangements.
- Defined what sort of alternative security product should be put in place.
- Determined the minimum requirements such a product would need to meet under the BSC arrangements. As part of this, the Workgroup was required to determine the most suitable format or structure of that product and how it would work in practice.
- Considered the likely uptake and support of such a product by BSC Parties.
- Considered whether the use of this product should be optional for Parties to use instead of the existing Credit Cover arrangements, as proposed by the Proposer, or whether it should be mandatory and replace the existing provisions. As part of this, the Workgroup would need to assess the impacts either option would have on the existing BSC arrangements.
- Assessed similar products, how they work in other markets, and whether these could be applied to the BSC arrangements.
- Determined the costs associated with implementing and maintaining any potential product and compared this against the benefits of it being available to BSC Parties to use.

Areas considered

The table below summarises the areas considered under P308, which formed the Workgroup Terms of Reference for the Modification:

Areas Considered
Is an alternative security product necessary for the BSC arrangements?
What sort of alternative security product would be needed for the BSC arrangements?
What are the requirements that need to be met by any alternative security product being introduced into the BSC arrangements?
How likely is an alternative security product to be taken up by BSC Parties?
Should the use of the alternative security product be mandatory or optional, and what impacts would these options have on the existing BSC arrangements?

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Areas Considered
What suitable alternative security products are available and could they be applied to the BSC arrangements?
What are the costs of implementing and maintaining an alternative security product and the benefits of having such a product available?
What changes are needed to BSC documents, systems and processes to support P308 and what are the related costs and lead times?
Are there any Alternative Modifications?
Does P308 better facilitate the Applicable BSC Objectives than the current baseline?

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5 Progression

Progression

Eggborough Power raised BSC Modification P308 on 4 June 2014 on behalf of Energy UK, with the issue at the time of raising being stated as 'the level of credit held across the energy industry is in some cases exceptionally high, above and beyond the actual risk that market participants are likely to incur'.

Following the Initial Written Assessment (IWA), the BSC Panel agreed to progress P308 to the Assessment Procedure on 12 June 2014. Since this point, and during the Assessment Procedure, there have been a total of five Workgroup meetings to discuss a potential solution and the overall progression of the Modification.

Due to the complexity of the Assessment Procedure of P308 and the work being completed on the Modification, the Panel has twice approved extensions. The first of these extensions was requested and approved for 10 months at the December 2015 Panel meeting (Panel 247), extending the Assessment Procedure to December 2016. The P308 Workgroup agreed that it did not want to rush the progression of the Modification due to its potential impacts, so this extension was due to awaiting analysis on the impacts that P305 'Electricity Balancing significant Code Review Developments' had on the imbalance price.

Due to the timescales required to compile a Workgroup Report to detail the progress of the Modification to this point, a further extension was requested and approved at the November 2016 Panel meeting (Panel 259), which extended the Assessment Procedure to January 2017.

Due to the continued compilation of the Workgroup Report in order to document the work that has taken place under the Modification and in order to allow the Proposer time to consider the Report, a further one month extension has been requested at the January 2017 Panel meeting (Panel 262). This extension will extend the Assessment Procedure to the February 2017 Panel meeting on 9 February 2017.

External support

During the early Workgroup meetings, it became apparent that the Workgroup could not, on its own, answer some of the questions posed under the areas of consideration for the Modification. In this case, the Workgroup determined that it required external support and in order to move forward with this, the Workgroup determined a set of initial requirements that could be used to procure external support for the Modification. Further detail on these requirements is in section six (Workgroup External Support).

The Proposer noted at the time of raising Modification P308 that some initial analysis had already been completed around alternative security products, and suggested that the Workgroup will need to continue and build upon this. The work conducted before the point at which P308 was supported by a firm named Marsh Ltd, who specialise in insurance broking and risk management.

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6 Workgroup External Support

Procurement of Workgroup External Support

In order to obtain external support for the Workgroup, ELEXON undertook a procurement process on behalf of the Workgroup. The Panel approved the request for external Workgroup support and following this approval, ELEXON set out a competitive tender process to identify a suitable provider for such external support. The initial requirements that the Workgroup agreed on formed part of the initial external support brief for each tender party, which were as follows:

- The product should pay out immediately upon request, in order to allow ELEXON to clear its position for that day following a default. If this is not possible, a view will need to be taken on whether the shortest possible timescales available from insurance companies would be acceptable under the BSC arrangements.
- Parties will have to opt-in to the product, with Parties being able to elect not to and instead continuing to fully cover their own position as per the current arrangements. Only the opted-in Parties would contribute to premiums and claims would only be made for defaults by these Parties.
- The product must provide a true risk transfer, whereby the underwriter takes on the risk.
- The industry will 'self-insure' (via cash or LoC, similar to present) up to a value to be agreed, and any central insurance would be to cover costs above that.
- There are two options to consider for the level of pay-out. The first is for unlimited pay-out on a claim and the second is for a cap on any pay-out, with any outstanding money above that being sought from the defaulting Party or, if this is not possible, all Parties via the Default Funding Share. Insurance companies would be asked to provide quotes for each option and, for the latter, to provide an acceptable level at which to set the upper cap.

Further to the requirements, the Workgroup agreed that the following areas required investigation by the external support provider:

- It needed to be determined whether the premiums are paid for by the opted-in Parties communally (whereby everyone pays equally based on market share or similar) or constituently (whereby some Parties may pay more based on the risk they pose). Care would need to be taken to ensure premiums do not spiral should there be more claims than expected.
- Any analysis for determining premiums should consider seasonal effects. For example, the system is likely to be tighter in Winter than in Summer, and so imbalance prices would likely be higher then and the risk of default potentially greater. It was noted though that premiums would likely be set on an annual basis rather than a seasonal basis.
- Behavioural changes also needed to be considered. It was considered that the presence of central insurance may cause Parties to take more risk with their position knowing that they are underwritten by everyone else. The impacts of other policies also needed to be considered, for example the changes proposed by the Electricity Balancing Significant code review (EBSCR) and being progressed under P305 which would introduce a more marginal imbalance price with the

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potential to be set to Value of Lost Load (VoLL) (proposed to ultimately reach £6,000/MWh).

ELEXON also produced educational documentation to enable any interested party tendering to provide support to the P308 Workgroup knowledge to understand the functioning of the current arrangements in the market.

Following the BSC Panel approving the procurement exercise, the competitive tender for external Workgroup support received three bids, including one from Marsh, who previously worked with the Proposer on the perceived issue of there being too much Credit Cover posted in the market. ELEXON reviewed the bids to determine the most suitable to provide the appropriate level of support to the P308 Workgroup.

After the competitive tender process concluded, ELEXON requested approval to commence the external support from the Panel, who also agreed the budget for such support. The Panel agreed a total budget of £80k, intended to include the delivery of a report from the consultant to the Workgroup and subsequent Workgroup support for discussions and follow-up actions.

INDECS Consulting was awarded the contract due to its independence as a consultancy, rather than being a broker, along with its portrayed knowledge and understanding of the task that was being requested. It was also determined from the aforementioned factors that INDECS Consulting would give the best level of cost-benefit to the Workgroup.

The initial requirements from the Workgroup were used as a basis for the contract for INDECS Consulting to provide expert support to the P308 Workgroup, with these requirements and supporting information detailed in attachment A.

Workgroup External Support Progression

INDECS Consulting provided expert support and guidance to the P308 Workgroup and ELEXON, including presentations at Workgroup meetings in order to run through potential options within the financial markets that may lead to a solution under P308. These presentations gave the Workgroup members a greater insight into the insurance market and how this market may be able to assist in rectifying the perceived defect with the current provisions of the BSC. INDECS Consulting also liaised with ELEXON to periodically discuss the progress of the Modification and developments within its investigations that may assist the Workgroup.

Following Workgroup 4 and initial work conducted by the external consultant in engaging with financial industry parties, ELEXON produced catastrophic loss analysis to support INDECS Consulting's investigations. This analysis detailed the financial scope of loss that an insurance product may be required to cover in the event of a medium sized Supplier defaulting, which would not be covered by wider regulatory intervention. This wider regulatory intervention relates to The Energy Supply Company Administration Rules (2013). This is a statutory instrument which details the circumstances within and process by which the UK government would intervene in the collapse of a major energy Supplier, to protect consumers and minimise the impact of a large failure on the wider energy markets. It came about in recognition of the potential damage that could be done by a large energy Supplier failing in the same way that a number of prominent UK banks failed during the financial crash in 2008-2009. It is different from Supplier of Last Resort in so far as it does not concern any event of Supplier insolvency.

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ELEXON met with INDECS on 7 June 2016 to discuss the progress of the Modification. At this stage of progression, INDECS was liaising with potential insurance providers and was preparing to discuss the catastrophic loss analysis provided by ELEXON (detail of this analysis can be found in section 7 of this paper). At this meeting, it became apparent to ELEXON that the work being conducted would unlikely lead to a solution that would rectify the defect identified when P308 was initially raised. At this point, it was noted that an insurance product could only cover a catastrophic loss scenario. Further, the costs of progressing work to develop a solution that would not, on its own, solve the original defect identified were escalating. The further spend and associated timescales to conclude the work with INDECS Consulting and devise a solution to resolve the original issue were unclear and were to a minimum value of £30k. This would exceed the Panel's previously approved budget for P308. On this basis, ELEXON took the decision to halt the work of INDECS Consulting on 9 June 2016.

ELEXON subsequently held a meeting with the Proposer and its representative to discuss progression of the Modification, where it was determined that a fifth Workgroup meeting should be held to gather the views of the Workgroup members. During ELEXON's meeting with the P308 Proposer and representative, it was determined that the Modification was not an urgent priority, and given the level of change in the market at the time, the further Workgroup meeting should be held in September 2016.

Overall to date, the work of INDECS Consulting has totalled £61,980.45. For this, ELEXON and the P308 Workgroup has received expert support and guidance on the workings of the insurance industry and how a potential product may fit into the BSC arrangements. Whilst there has not been any tangible product delivered, the intangible advice provided by INDECS Consulting has, in the opinion of ELEXON, been significant in the progression of P308 to the current stage. INDECS attended three P308 Workgroup meetings (Workgroups two, three and four) to present and lead discussions through the financial side of the meeting agenda. INDECS were also able to educate and discuss the technical side of the financial markets involvement in P308 so that the Workgroup could have informed discussions.

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7 ELEXON Analysis

Catastrophic Loss Analysis

As noted previously and following the fourth Workgroup meeting, ELEXON produced catastrophic loss analysis for INDECS Consulting to demonstrate the value of cover that may be required through an insurance product that includes covering a worst-case catastrophic scenario. ELEXON analysed a worst-case scenario as an insurance product by its nature, must countenance events on the extremes of the probability bell curve. This analysis was split into two parts, the first covering Supplier failure and the second covering a Demand Control event.

A catastrophic event in the case of Supplier failure relates to the scale of costs that BSC Parties may be exposed to in a circumstance that a medium-sized Supplier is unwilling or unable to pay for its entire demand requirement through BSC Trading Charges. A medium-sized Supplier was used for the analysis as it is likely that the Department for Business, Energy and Industrial Strategy (BEIS) or Ofgem would intervene in the case of a Big 6 Supplier failing to buy energy in the wholesale market due to the financial implications. In this case, the Energy Supply Company Administration Rules could allow the Administrator to allow the Supplier to continue trading with a view to winding up or selling the business.

Further, ELEXON analysed a Demand Control event scenario, which is an event instructed by National Grid, acting as the System Operator, whereby demand customers are temporarily, involuntarily disconnected. Demand Control Events occur as a last resort to enable National Grid to reduce the demand for energy when there is insufficient supply. Whilst a Demand Control Event may only last for a short period of time, the expectation of such an event happening or recurring can affect National Grid's calculation of Loss of Load Probability (LoLP). This is significant as LoLP values can have a strong influence on the calculation of System Prices.

By combining both of the above scenarios, the catastrophic loss analysis shows that an insurance product to cover a catastrophic event may be required to cover up to c. £26m.

The full catastrophic loss analysis can be found in attachment B of this paper.

Analysis of Supplier Defaults

During the work that INDECS Consulting was conducting as noted previously, it became apparent that the product being developed could not, on its own, rectify the original defect noted at the time P308 was raised. The product being developed by INDECS Consulting would only prevent Parties from being required to cover a defaulting Parties' Trading Charges, but would not impact the everyday operational level of credit that Parties lodge. Following the discussion with INDECS where it became apparent that there did not appear to be an insurance product being developed that would resolve the original defect identified, ELEXON investigated the potential that the catastrophic loss product could resolve a separate identified defect that may be present in the current arrangements. This potential defect was that outstanding charges upon a Party going into default are smeared across the industry via Default Funding Shares. If this were to be the case, the catastrophic loss product could be taken forwards and progressed further under a separate Modification.

In advance of the fifth Workgroup meeting, ELEXON conducted analysis to look into the actual scale of financial impact of Supplier failures under the BSC since 2001. This would demonstrate the historic impact that a catastrophic loss insurance product on its own

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would resolve under the BSC. An overview of this analysis is listed below with the figures correct as of 18 August 2016:

- 16 Parties had defaulted with outstanding charges since 2001.
- C. £21.7m total unpaid charges.
- C. £12.2m previously repaid through administration processes. (60% of total unpaid charges).
- C. £9.5m unrecovered charges accounted for through Default Funding Share.

Due to confidentiality of the organisations implicated in the analysis and the values to which these Parties defaulted, the full analysis cannot be shared publically, but was explained to the Workgroup at its fifth meeting.

Whilst the analysis ELEXON conducted shows that since 2001, £9.5m in unpaid Trading Charges has been recovered through Default Funding Share, it does not account for a catastrophic scenario such as the one that ELEXON analysed. Therefore, it is possible that the total value, if no finances were recoverable through administration processes, could total c. £26m in one event.

The Workgroup acknowledged the analysis that ELEXON presented detailing the impacts that defaulting Parties have had since 2001, along with the catastrophic loss analysis outcomes. In consideration of all of the evidence, the Workgroup did not express interest in pursuing a Modification that solely seeks to rectify a catastrophic loss scenario.

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8 Workgroup's Discussions

This section summarises key points that the Workgroup discussed during its assessment of P308.

Intervention Points

INDECS Consulting presented an overview of three intervention points over the Workgroup meetings it attended, that it considered important to devising a solution for the Modification. These intervention points relate to the points at which an alternative credit product could potentially become effective under the proposed solution to P308.

Intervention Point 1

This is a tool for loss control and management of credit risk rather than the point for risk transfer to effectively occur.

- At this point of intervention, a guarantee of some sort would be required for the default, but it was noted that the mechanism for calculating any funding share needed already exists. However, it was suggested that there was a possibility that this intervention point may not be appropriate for insurers as it is only a temporary position.

Intervention Point 2

The second intervention point related to a situation whereby a payment default occurs and there is insufficient cover (either LoC or Cash Cover) provided by the defaulting Party to allow the Funds Administration Agent (FAA) to clear their accounts by the end of the day.

- Two possibilities at this intervention point were discussed:
    - ELEXON retains LoCs and Cash Cover as mechanisms, but only to cover the comparatively tiny volumes of Default that we see at this intervention point; or
    - ELEXON adopts either a pre-funded or post-funded approach to temporarily cover these defaults.
- ELEXON noted that adjustments would need to be made to the amounts owned to BSC creditors on a temporary basis to make the clearing account zero off.
- The Workgroup noted that the existing credit mechanism is post-event but agreed that this mechanism would need to become a pre-event activity otherwise Parties would not be willing to pay. INDECS considered that this could be funded through annual charges, which would build up over time.
- It was noted that there was again a potential that this position may not be suitable for insurers as again this is a temporary position; however in this instance, the temporary position would need to be declared.
- INDECS highlighted during the Workgroup discussions that this may be the most hazardous intervention point for changing the current arrangements.

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Intervention Point 3

The third intervention point relates to an irrevocable point where BSC Parties have entered Section H 'General' default. At this point, the BSC Panel has extensive powers under Section H 3.2.1, with these powers causing the potential for reputational consequences.

- INDECS highlighted that this would be the most likely solution that insurers would be interested in, but did not rule out the other intervention points at the Workgroup stage.
- INDECS noted that it would propose means of funding catastrophic losses from a major trader (insurance market, capital markets, pre and post loss funding). This would be carried out through formal and informal risk transfer structures such as captive insurer, mutual insurer, loss fund, extension of funding by Parties etc.

INDECS Work following Intervention Points

Following the Workgroup being taken through the three intervention points identified by the insurance Consultant, INDECS informed the Workgroup of the background research and initial discussions held with potential insurance product providers.

INDECS informed the Workgroup that it would:

- Further examine catastrophe options;
- Crystallise temporary shortfall risks (non-insurance; will require management of risk within the BSC);
- Seek high level feedback from insurance/capital markets; and
- Determine if pricing ranges are available for permanent default risk.

INDECS Consulting noted three scenarios whereby an insurance product may be able to rectify the defect identified under P308, as follows:

- Trading control;
- Temporary Default; and
- Permanent Default
    - Attritional losses
    - Catastrophic losses.

Moral Hazard

The Workgroup discussed the concept of moral hazard whereby Parties take more risk in their trading and credit actions due to the market arrangements protecting the Party from the risks that it may have otherwise faced. For instance, an increase in moral hazard may relate to an increase in the risk of rogue trading or insolvency. ELEXON informed the Workgroup that the solution must not have an effect of increasing moral hazard and must also provide industry with reasonable assurance, possibly based upon:

- Patterns of behaviour, i.e. 'typical' and 'abnormal' activity; or
- Another £ equivalent metric to insert into Credit Default calculations.

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In either case, grouping of Parties into behaviour types or the limited on-going use of Credit Cover could occur.

The P308 solution in addition to intervention points

In addition to the intervention points, the Workgroup agreed that any replacement to the existing credit arrangements devised under P308 would be required to serve the following functions:

- Risk transfer should be achieved for part or all of the risk.
- Consider how losses may be pre or post loss funded.
- Remove duplication relating to the cost of risk in the system.
- Still protect potential catastrophic failure in the market to the same or a similar level as currently provided through LoCs and cash.
- Primarily consider solutions which do not change the management or vires of ELEXON to carry risk (but still consider options that would).
- Solutions need to be resilient for long term change in management and/or transfer of the credit risks.

Actions on ELEXON

Following the third and fourth Workgroup meetings, ELEXON took a number of actions that it was required to investigate further:

- As a pre-condition of P308, ELEXON would have been required to look at the Section M arrangements in detail should P308 be approved. This would have require a detailed piece of analysis to be undertaken; in the first instance this would have involved identifying changes that could be made to provide robust assurance without the existing system of Letters of Credit (LoC) or cash cover. This is due to P308 being a fundamental change for the industry.
- ELEXON was required to carry out some analysis to look for an appropriate metric to replace the CCP used for determining Level 1 and Level 2 Credit Defaults. ELEXON intended to this analysis to the Workgroup before consultation with the industry.
- ELEXON noted that it would liaise with its finance and legal teams regarding ELEXON acting as a named insurer. This action followed concerns that this requirement, as put forward by potential insurers, could impact ELEXON's vires.
- ELEXON pledged to look into any comparisons with Connection and Use of System Code (CUSC) Modification CMP228 - Definition of "Qualified Bank" as it was noted in November 2014 that 'there were four insurance bonds covering seven CUSC Parties which make up 4.9% of securities held against Cancellation Charges and 31.2% of securities held against Termination Accounts'. ELEXON also noted that it will investigate how many Parties have made use of P306 since it was implemented on 14 November 2014.

ELEXON acknowledges that the actions listed above were not completed. Due to the ongoing discussions with INDECS Consulting over the progress of the Modification, it was

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deemed that progression of some actions should be halted until further information became available from INDECS Consulting. As ELEXON took action to halt the work of the external consultant and in turn pause progression of the Modification until the Workgroup was convened, the actions were not completed in full before the fifth Workgroup meeting.

Workgroup Report and documenting the P308 work to date

At the fifth Workgroup meeting, the Workgroup was provided with updates on all of the work conducted to date, and was briefed on the ceasing of further work by INDECS Consulting.

The Workgroup agreed with ELEXONs position that the insurance product being developed would not, on its own, meet the original issue/defect from the time P308 was initially raised. Following this, and give that the costs to continue to develop the solution were not clear and to a minimum value of £30k, the Workgroup members, excluding the Proposer, agreed that the Modification should be withdrawn. The Proposer's representative wished to receive a report detailing the work that had been conducted to date in order that an informed decision can be made on reflection of the information detailed. The Proposer's representative noted that they were minded to withdraw the Modification, but that a final decision on the Modification would be made following the receipt of such report.

Concerns were raised by the Workgroup that, if the Modification were to be withdrawn as per the majority Workgroup recommendation, the work conducted may not be recorded should a future Modification to the Credit arrangements require similar analysis. The Workgroup wished to have confirmation that the work conducted and financial send would not be wasted. ELEXON confirmed to the Workgroup that all of the work conducted on P308 would not be lost and if the issue were to be raised again in the future, the work conducted under P308 could be resurrected.

Further Credit Analysis

The Workgroup requested that analysis be conducted into Credit within other markets in order to compare and determine whether there is a real or perceived issue within the market. ELEXON was not able to fulfil this request directly as it does not in itself, have the expertise in other markets to determine whether there are issues relating to credit in other markets that may have similar arrangements. Further, should any issues have been noted or brought to ELEXONs attention that exist in other markets, ELEXON would not have been able to analyse such issues on the grounds of expertise and would have required external assistance.

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9 Other Credit Impacting Modifications

At the fifth Workgroup meeting, the Workgroup requested that detail be provided of other Modifications that have impacted Credit, the issues that such Modifications addressed and the overall impacts that these have had on the levels of Credit lodged in the market. For this analysis, ELEXON has detailed information about Modifications P306 'Expanding the definition of a 'Letter of Credit' to include regulated insurance companies', P307 'Amendments to Credit Default arrangements' and P310 'Revised Credit Cover for Exporting Supplier BM Units'

Since the implementation of these Modifications, analysis has been conducted by ELEXON to look into the impacts that the changes had on the market. The analysis included the following:

- A six-month review of P306 (attachment C);
- A six-month review of P307 and P310, with a one year review of P306 (attachment D); and
- A one-year review of P307 and P310, with additional analysis on P306 (attachment E).

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10 Next Steps

The Proposer and its representatives were presented with this P308 Workgroup report in order to consider the best course of action. ELEXON will discuss the report with the Proposer and agree whether the Workgroup's initial view that P308 should be withdrawn should be realised.

The BSC Panel will be provided with an update on the decisions surrounding P308 at its meeting on 19 January 2017. Subject to the one month extension being granted, the BSC Panel will be provided a further update at its meeting on 9 February 2017.

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Appendix 1: Workgroup Details

Workgroup membership and attendance

P308 Workgroup Attendance						
Name	Organisation	2 Jul 2014	18 Jun 2015	14 Jul 2015	5 Oct 2015	16 Sep 2016
Members						
Douglas Alexander	ELEXON *(Chair)*	✗	✗	✗	✗	✓
Elliott Harper	ELEXON *(Lead Analyst)*	✗	✗	✗	✗	✓
Dean Riddell	ELEXON *(Chair)*	✓	✗	✗	✗	✗
David Kemp	ELEXON *(Chair)*	✓	✓	✓	✓	✗
Claire Kerr	ELEXON *(Lead Analyst)*	✗	✓	✓	✓	✗
Kyle Martin	Energy UK (Proposer's Representative)	✓	✓	✓	✓	✓
Andy Colley	SSE	✓	✓	✓	✗	✓
Colin Prestwich	Smartest Energy	✓	✓	✗	✓	✓
Karl Maryon	Haven Power	✓	✓	✓	✓	✓
Gary Henderson	IBM on behalf of Scottish Power	✗	✓	✓	✓	✓
Dimuthu Wijetunga	Npower	✗	✗	✗	✗	✗
Lisa Waters	Waters Wye Associates	✗	✗	✗	☎	✗
Paul Mott	EDF	✓	✗	✓	✓	✗
Tryfon Tzelis	E.ON	✓	✓	✗	✗	✗
Helen Stack	Centrica	✗	✗	✗	✓	✓
Attendees						
Nicholas Rubin	ELEXON (Design Authority)	✗	✗	✗	✗	✓
Jonathan Priestley	ELEXON (Design Authority)	✓	✗	✗	✗	✗
Max O'Connor	ELEXON (Design Authority)	✗	✓	✓	✓	✗
Nicholas Brown	ELEXON (Lead Lawyer)	✗	✗	✗	✗	✓
Tina Wirth	ELEXON (Lead Lawyer)	✓	✓	✗	✗	✗
Mark Williams	INDECS Consulting	✗	✓	✗	✓	✗
Nick Coffey	INDECS Consulting	✗	✓	✓	✗	✗
Tom Shiels	INDECS Consulting	✗	✗	✓	✓	✗
Matthew Ramsden	Ofgem	✗	✗	✗	✗	✓
Graham Knowles	Ofgem	✓	✗	✗	✗	✗
Joseph Gildea	Ofgem	✗	✓	✓	☎	✗
Chris Tang	Marsh	✓	✗	✗	✗	✗
David Munday	npower	☎	✗	✗	✗	✗

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P308 Workgroup Attendance						
Name	Organisation	2 Jul 2014	18 Jun 2015	14 Jul 2015	5 Oct 2015	16 Sep 2016
Lucy Rowe	npower	✗	☎	✗	✗	☎
Miranda Greenway-March	npower	✗	✗	✗	✗	☎
Paula Sampson	npower	✗	☎	✗	✗	✗
Gemma Truran	npower	✗	✗	✗	☎	☎

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Appendix 2: Glossary & References

Acronyms

Acronyms used in this document are listed in the table below.

Acronyms	
Acronym	Definition
BEIS	Department for Business, Energy and Industrial Strategy
BMRS	Balancing Mechanism Reporting Service
CCP	Credit Cover Percentage
CUSC	Connection and Use of System Code
EBSCR	Electricity Balancing Significant Code Review
ECVN	Energy Contract Volume Notification
FAA	Funds Administration Agent
IWA	Initial Written Assessment
LoC	Letter of Credit
LoLP	Loss of Load Probability
MVRN	Metered Volume Reallocation Notification
NDA	Non-Disclosure Agreement
VoLL	Value of Lost Load

External links

A summary of all hyperlinks used in this document are listed in the table below.

All external documents and URL links listed are correct as of the date of this document.

External Links		
Page(s)	Description	URL
7, 20	BSC Modification P306 'Expanding the definition of a 'Letter of Credit' to include regulated insurance companies'	https://www.elexon.co.uk/mod-proposal/p306/
7, 20	BSC Modification P307 'Amendments to Credit Default arrangements'	https://www.elexon.co.uk/mod-proposal/p307
7	BSC Modification P308 'Alternative security product for securing credit under the BSC'	https://www.elexon.co.uk/mod-proposal/p308/
10	BSC Modification P305 'Electricity Balancing Significant Code Review Developments'	https://www.elexon.co.uk/mod-proposal/p305/

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External Links		
Page(s)	Description	URL
20	BSC Modification P310 'Revised Credit Cover for Exporting Supplier BM Units'	https://www.elexon.co.uk/mod-proposal/p310/

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