

## **ASSESSMENT REPORT for Modification Proposal P227**

### **'Extension of the definition Of ECVAA Systems to include the centrally provided communications network'**

**Prepared by: P227 Modification Group**

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This document has been distributed in accordance with Section F2.1.10 of the Balancing and Settlement Code.<sup>1</sup>

**Proposed Modification P227** seeks to ensure that Parties have the ability to resubmit contracts as a result of a failure of the centrally provided communications network. The solution proposes to introduce the concept of a 'Notification System Incident' to describe the circumstance when the centrally provided communications network<sup>2</sup> fails.

The solution addresses the defect for both the current and any future arrangements for provision of communication services.

This report details the assessment of the main defect identified by P227 and the solution stated in the proposal. It also outlines the conclusions of the Modification Group regarding their own analysis and independent analysis into how communications services could be alternatively provided.

#### **MODIFICATION GROUP'S RECOMMENDATIONS**

The P227 Modification Group invites the Panel to:

- **AGREE a provisional recommendation that Proposed Modification P227 should be made;**
- **AGREE a provisional Implementation Date for Proposed Modification P227 to be 5 Working Days after the Authority Decision;**
- **AGREE the redlined text for the Communications Requirements Document for the definition of 'centrally provided communication network';**
- **AGREE the draft legal text for Proposed Modification P227;**
- **NOTE the additional information provided by the Group outlining how communication services could be provided differently;**
- **AGREE that Modification Proposal P227 be submitted to the Report Phase; and**
- **AGREE that the P227 draft Modification Report be issued for consultation and submitted to the Panel for consideration at its meeting of 09 April 2009.**

<sup>1</sup> The current version of the Code can be found at <http://www.elexon.co.uk/bscrelateddocs/BSC/default.aspx>.

<sup>2</sup> The centrally provided communications network extends from the participant router to the router at the Central Systems, but does not include a loss of power to the participant router.

## CONTENTS TABLE

<b>1</b>	<b>Summary of P227 Assessment Report.....</b>	<b>3</b>
<b>2</b>	<b>Solution.....</b>	<b>5</b>
2.1	Why Change?.....	5
2.2	What would change?.....	7
<b>3</b>	<b>Assessment of Other Communication Models .....</b>	<b>9</b>
3.1	Ofgem letter to BSC Panel .....	9
3.2	Group's Response.....	9
3.3	Group's Conclusions.....	12
<b>4</b>	<b>What Does Industry Think? .....</b>	<b>14</b>
4.1	Comments and Responses.....	14
<b>5</b>	<b>What are The Group's Conclusions? .....</b>	<b>16</b>
5.1	Costs-Benefits Analysis and BSC Objectives .....	16
5.2	Proposed Changes to CRD and Legal Text .....	16
5.3	Implementation Date .....	17
5.4	Conclusions and Recommendation.....	17
<b>6</b>	<b>Terms Used in this Document.....</b>	<b>18</b>
6.1	References .....	18
	<b>Appendix 1: Draft Legal Text .....</b>	<b>19</b>
	<b>Appendix 2: Process Followed .....</b>	<b>19</b>
	<b>Appendix 3: Results of Assessment Procedure Consultation .....</b>	<b>22</b>
	<b>Appendix 4: Results of Impact Assessment.....</b>	<b>23</b>

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# 1 SUMMARY OF P227 ASSESSMENT REPORT

## Summary of Proposal

### Issue:

Currently, if there is a failure of the centrally provided communications network Parties cannot re-submit contract notifications which could result in Parties being in energy imbalance, despite the fact that they may have been balanced if the communications failure had not occurred.

### Objective of P227:

P227 seeks to ensure that parties have the ability to resubmit contracts as a result of a failure of the centrally provided communications network. The solution proposes to introduce the concept of a 'Notification System Incident' to describe the circumstance when the centrally provided communications network fails.

The solution uses the concept of defining the 'party system boundary' as the point at which responsibility for communication shifts from central provision to the Party. The definition will be contained in the Communications Requirement Document. The P227 solution is therefore robust to any future changes in the provision of communications by allowing for the definition of 'centrally provided communication network' to be revised if/when necessary. This flexibility negates any perceived need for a Sunset Clause.

## Impacts

### Industry:

- Generators
- Interconnectors
- Suppliers
- Non-Physical Traders
- Party Agents (ECVNA and MVRNA)

### BSC Agents:

- ECVAA

### Documentation:

- Sections P and X of the BSC;
- Communication Requirements Document; and
- BSC Service Descriptions

## Implementation Costs

### Industry:

The impact assessments from industry determined no implementation cost for Parties.

### BSC Agent costs:

Implementation - £1,800

Ongoing Operational - £3,240 per annum

## Implementation approach

The Modification Group recommends the following Implementation Dates:

- **5 Working Days after an Authority decision.**

### Benefits and Drawbacks under Applicable BSC Objectives (b) and (c)

#### Benefits:

- The System Operator analysis supported the view that there would be a financial benefit under Applicable BSC Objective (b);
- The ability to resubmit under P227 removes the risk that Parties are exposed to imbalance charges due to a failure of the centrally provided communications network better facilitating new entry and competition. BSC Objective (c)

#### Drawbacks:

- There might be a marginal detrimental impact on Objective (d), but this would be substantially outweighed by the benefits under Objectives (b) and (c).

### Materiality and Benefits

Parties would be able to submit a contract notification if a communications failure occurs (beyond their control). For example, under the current arrangements, a failure of the centrally provided comms network 30 min before Gate Closure, could potentially cost in a single settlement period:

- System Operator: **£51K** for additional balancing actions (for detailed analysis and scenario provided, please refer to Appendix 6 of [Second Consultation](#))
- Parties: **£80K** in imbalance charges (for detailed analysis, please refer to section 4 of [Requirement Spec & Consultation](#))

Please note these costs are indicative but they do highlight the possible financial impact in a case of comms failure.

### Modification Group's Recommendation

Within the Modification Group there is a:

- **Unanimous** view that Proposed Modification P227 **is** better than the current arrangements;

The Group's unanimous recommendation is that **P227 Proposed Modification SHOULD be made.**

## 2 SOLUTION

### 2.1 Why Change?

#### 2.1.1 What is ECVAA and what does it do?

The Energy Contract Volume Aggregation Agent (ECVAA) is the BSC Central Service responsible for receiving, processing and validating all Contract Notifications (ECVNs and MVRNs). These are then aggregated by Party Account and used in the Settlement calculations.

#### 2.1.2 Current Arrangements

Under the current arrangements, if the ECVAA experiences a System Failure, a recovery procedure exists that allows participants to submit/re-submit contract notifications to the ECVAA, post Gate Closure, for the affected Settlement Periods. However if the communications network fails, no such provision exists.

#### 2.1.3 Communications with ECVAA Systems

Participants have a choice of two network communications options to support data communication in both directions between participant systems and BSC Central Systems; these are known as the High Grade Service and Low Grade Service.

- The **High Grade Service** transmits communications from the router at the participant's site via dedicated telecommunications facilities to the router at the BSC Central Systems Site. Upon application by a participant for the provision of the High Grade Service to ELEXON the BSC Agent provides the participant with a router at its site which connects to the participant's network infrastructure and communications lines. The participant is responsible for its connection to its router.
- The **Low Grade Service** transmits communications from the router on the participant's site via the public Internet to the Internet Portal for the BSC Central Systems Internet Service Provider. Communications received by the Internet Service Provider are then transmitted to the router on the BSC Central Systems site. Participants are responsible for providing their own links into the Internet.

#### 2.1.4 What's the issue?

The current ECVAA System Boundary for the High Grade and Low Grade Services extends only as far as the router on the BSC Central Systems site. In the event of a communications failure beyond the current ECVAA System Boundary that prevents contract notifications being made, participants do not have recovery provisions.

The inability to successfully send and receive confirmation of notifications could result in Parties being in energy imbalance and hence could have a significant effect on imbalance charges, despite the fact that they may have been balanced if the communications failure had not occurred.

The Proposer notes that such inconsistent treatment means that a Party has a mechanism to prevent any charges that arise in the event of an ECVAA system failure, yet would be exposed to imbalance charges in the event of a central communications failure.

#### 2.1.5 Purpose of P227

P227 seeks to allow for Parties to resubmit notifications as a result of a failure of the centrally provided communications network. P227 would do this by introducing the concept of a 'Notification Failure' to describe the circumstance when the centrally provided communications network fails. Parties would then be

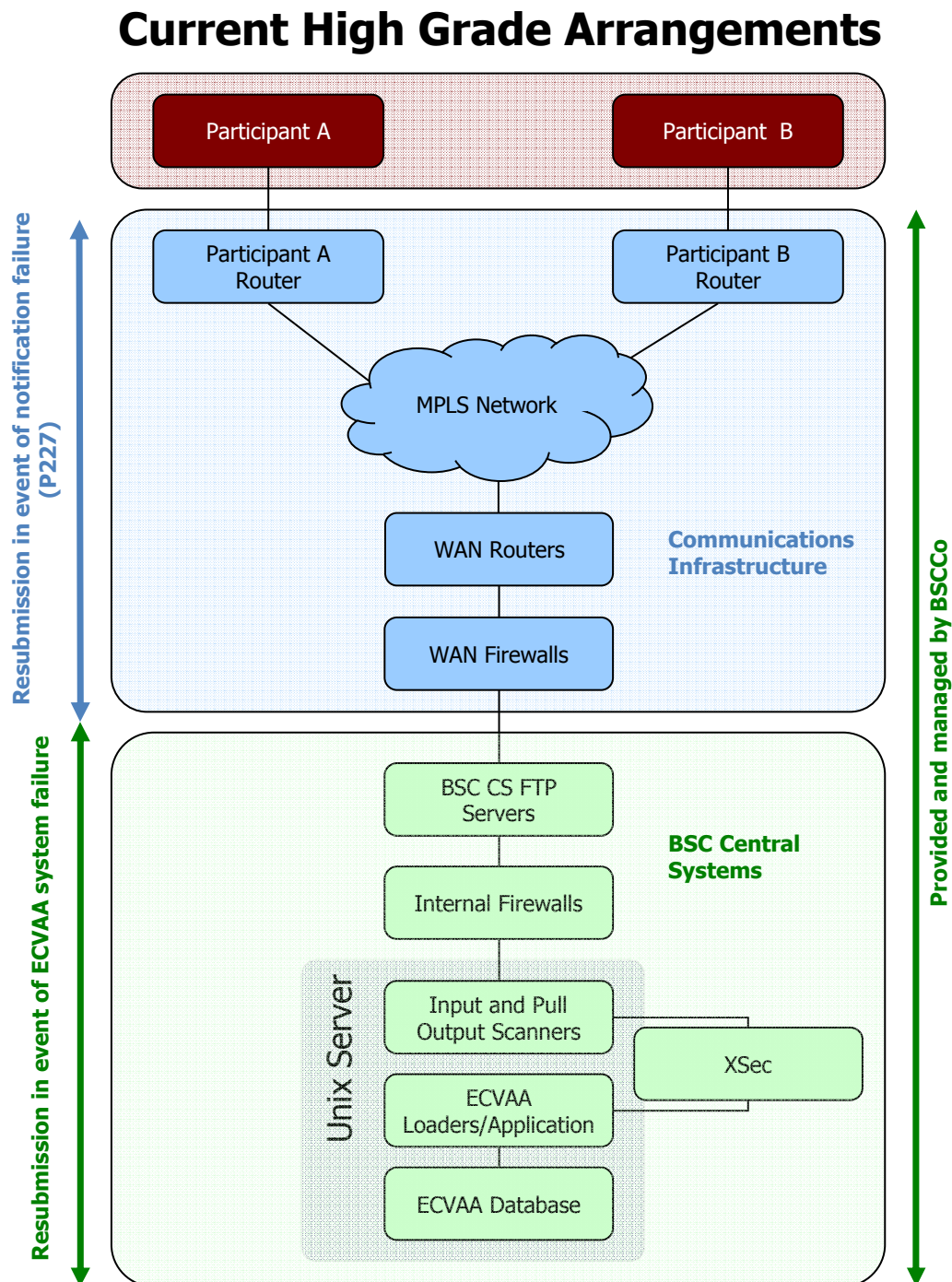
able to utilise the same provisions that currently exist in the Code for contract resubmission resulting from an ECVA System Failure.

### **2.1.6 Previous Modifications**

Modification P227 is modelled on the Alternative Modification Proposal P1 '[Extension of the Definition of ECVA System Failure for Permitting Post Gate Closure Notification](#)'. P1 sought to extend the definition of 'ECVA System Failure' to the High Grade Service only. However, the Group developed an Alternative solution that extended the provisions to both the High and Low Grade Service. The Modification Group, a majority of industry respondents and the BSC Panel recommended that the P1 Alternative Modification should be approved. The Authority (Ofgem) rejected both the Proposed and Alternative Modifications, on the basis that there may be potential for competition in provision of communication services and neither Modification contained a 'sunset clause' that anticipated this. A sunset clause would mean that if competition in provision of communications was realised, the need for any communication failure provisions would be removed as the risk would then be borne by the Party in its own contractual agreements with communications providers.

## 2.2 What would change?

This section outlines the solution for the Proposed Modification, as developed by the Modification Group. P227 seeks to ensure that Parties have the ability to resubmit contracts as a result of a failure of the centrally provided communications network. The solution proposes to introduce the concept of a 'Notification System Incident' to describe the circumstance when the centrally provided communications network fails, as shown in Figure 1.



**Figure 1 – Communications via the High Grade Service**

In the event of a communication failure (i.e. a 'Notification System Incident') ELEXON will notify the industry. Parties will then have the ability to resubmit contracts using the same process currently used for ECVAA System failures.

If Parties believe there has been a communications failure that ELEXON has not notified the industry of, Parties would have 1 Working Day (WD) to notify ELEXON. ELEXON will investigate and confirm to industry if such a failure occurred. Subject to ELEXON confirmation, Parties will then have the ability to resubmit contracts using the same process currently used for ECVAAs System failures.

### **2.2.1 Future proofing**

The Group are aware that Ofgem have raised questions regarding the provision of competition in communications. Questions have been raised as to whether the current arrangements are the most suitable communications model and what would be the impact if the communications model were to change. A Modification Group member asked whether there would always be a central element to the comms network, and whether this actually mattered given the ability to re-define the party system boundary to be the edge of the ECVAAs system as is now.

The outcome of the independent consultant confirmed that under all of their proposed models there would always be a central component beyond the control of individual parties. For this reason, and to ensure the future proofing of the P227 solution against changes in comms provisions, the P227 solution provides for the boundary between central systems and parties' systems to be defined in the CRD (Attachment 1). This will provide more flexibility if the boundary were to change following a new comms solution to be introduced.



### 3 ASSESSMENT OF OTHER COMMUNICATION MODELS

Additional work has been carried out by the Modification Group in order to support the progression of P227. This work did not intend to change the defect identified or the proposed solution, but sought to provide comfort to the Authority that the P227 solution was robust to any change in the way communications were provided, and how it affects parties' incentives. This section highlights concerns from the Authority and summarises the Group's conclusion that P227 is a robust solution.

#### 3.1 [Ofgem letter to BSC Panel](#)

During the first consultation period Ofgem wrote to the BSC Panel Chairman (please refer to Attachment 6) setting out a number of points which it wished the Modification Group to consider to enable the Authority to fully consider P227, especially in light of the reasons for the Authority rejecting P1 (lack of greater competition in communications services). Ofgem believed that without this information it could not make an informed decision on P227. The points raised were summarised as:

- *Q1. To assess the current communication system and management of risk through;*
  - a. Examining the impact of changes in the boundary definitions*
  - b. Examining best practice and the level of choice for communication services in other markets (preferably from an independent source)*
  - c. Identifying potential barriers to industry participants and specialist companies and examine the contractual arrangements between ELEXON and BSC Agent.*
- *Q2. To request analysis from NGET on the proposal's potential impact on the electricity balancing mechanism and associated balancing costs.*

To answer the questions above, the Group conducted additional work on how communications to BSC systems could alternatively and practically be provided. Additional independent analysis was commissioned into questions raised by Ofgem and Analysys Mason were asked to produce a report which is included as Attachment 5 to [Second Consultation](#).

#### 3.2 Group's Response

The Group's answers to the questions raised by Ofgem are summarised below:

##### 3.2.1 Question 1 (a)

The Group concluded that there are other ways to deliver communications, but the P227 solution will cater for any changes to provision of communications service. Section 2 of the [Second Consultation](#) sets out the analysis, conducted by the Group and by the independent consultancy, regarding alternative ways to provide communications.

The Group also considered how else the communications services could practically be delivered between Parties and ECVA. Four options for providing communications were initially identified and assessed. These are listed below and diagrams are contained in Appendix 5 that identify the boundaries associated with options a), c) and d).

- a) Current baseline – single service provider sourced by ELEXON/Logica
- b) P227 solution – not applicable
- c) Multiple providers via ELEXON/Logica – several service providers sourced by ELEXON/Logica
- d) Party specific Comms – any service provider sourced by Party and connecting the to central hub via a specified communications portal

After the comparison, the Group concluded that:

- The above options are reasonable theoretical models for delivering the communications service. However none of the options resolve the defect raised by P227.
- As you would expect there is a large amount of documentation change arising from the Party specific option. Whilst all this is manageable, at a cost, there was serious concern with regards to how service levels could be established and the ability to secure Disaster Recovery arrangements.
- Compared to the current baseline, it is suggested that given the activities the Multi Providers option and Party specific option will cause the costs to increase for ELEXON, the BSC Agent and Parties. There are increased contract costs for agreeing multiple contracts,, implementation costs and operational costs.
- ELEXON has recently re-negotiated the full BSC Services Agreement (of which the High Grade Services are a part) and it would be costly to exit from that agreement.
- The Group observed that the costs associated with failure increases. There are additional points for failure from having a selection (under multi Party) and numerous (Party specific) communications networks.
- It seems unlikely that a single Party could easily gain agreement from a network provider to back off the risk of communications failure. If the costs of an annual communications service is £3,000-£5,000 but the consequence of a failure is in the order of >£10,000, it is unclear whether a provider would agree to guarantee this cost.
- For the Multi Provider option and Party Specific option, there would be more operational and implementation **risks** of failure compared to the current baseline. In addition, for the Party Specific option, the Party would be completely responsible for its own network. The table in Section 6 in Appendix of [Second Consultation](#) set out clearly why the Group feel there are a number of disadvantages and risks associated with moving from the current arrangements with little benefit.

Detailed analysis can be found in Appendix 4 of the [Second Consultation](#) Document.

### 3.2.2 Question 1 (b)

Independent Analysis was carried out to investigate the following points:

- *What other models are used for provision of communications services in other markets:*

Analysys Mason agreed a set of criteria with ELEXON against which to assess the requirements for communications with the model for the BSC Central Systems. A number of service provider models for different markets were investigated and from these four were directly compared with the current communications service. The four models for comparison were; an overseas electricity settlement transaction management service (TMS); an overseas stock exchange settlement and TMS; an online gambling transaction service; and a foreign exchange settlement and TMS. Please refer to the Independent Analysis Report: Attachment 5 of the Second Consultation Document.

- *What are the variations in the types of service on offer:*

Currently participants have the choice of connecting to Central Systems either through the Low Grade Service (public internet – for which no charge is payable directly to ELEXON by the participant) or the High Grade Service (secure, dedicated line- for which a charge is payable directly to ELEXON by the participants). A participant may choose to use both options. Additionally a participant may have multiple High Grade

connections. As of 1 April 2009 participants have the added choice of selecting the type of High Grade Service they require (based on desired volumes, back up and Disaster Recovery requirements), these are displayed in Appendix 3 of [Second Consultation](#).

The current numbers of users are:

- Low Grade Line: There are 59 Low Grade users who have Low Grade access only.
- High Grade Line: There are 68 participant lines. 16 participants have 2 Lines, 3 participants have 3 lines and 27 participants have a single line.

The Monthly Charge of Data line with **9 options** can be found in the [Second Consultation](#) (Table 4.1 in Appendix 3). The Total annual rental and support costs (2009/10) range from £3,665 to £9,967, dependent on the options of backup and technical support.

The Group concluded that the viability of further competition in provision of communication services is subject to the size of the market. It seems unlikely that a single Party could easily get agreement from a network provider to back off the risk of communications failure.

- *How do these models compare with the communication services for BSC Central Systems (and therefore Party management of risk associated with a communications failure);*

The independent analysis concluded that when compared to the models assessed:

- The current Central Systems service model provides substantially more choice in its High Grade (HG) offering compared to an overseas electricity TMS;
- Central Systems meets the general system availability and redundancy needs;
- Should a there be a desire to allow multiple service providers to connect into a central system, a model similar to the overseas Stock Exchange model identified in their analysis would be the most appropriate model. A suggested model for this solution, providing a high-level view of a possible design, is illustrated at Annex G of the independent analysis report; and
- Users would need to determine if a change is desirable (based on it being more cost effective for them and Central Systems to implement).

### 3.2.3 Question 1 (c)

ELEXON was asked to establish some figures for the potential change in costs, noting that these values were broad estimates. ELEXON provided the following estimates for changes in Operational and Procurement Costs. Please refer to Appendix 4 of [Second Consultation](#).

#### **Operational Costs:**

The Operational costs quoted below are an estimation of cost to investigate a comms failure, i.e. determine the point of failure and get it resolved. It is estimated to take 0.5 - 1 days effort depending on the specific issue. If the point of failure is outside the remit of Central Services, it would be up to the affected Party to resolve the issue. It is important to note that the Central Services Agent may assist in determining the point of failure in this scenario by concluding that there were no problems with the Central Services themselves

The **current** cost, based upon comms issues occurring once per quarter will be **£960** per year (£240\*4, where £240 is a suggested day rate for operational consultants).

**Multi Party** – assuming there are three vendors and the occurrence of failure is proportionate to a single vendor then there will be an increase in costs of  $([960 \times 3 = £2,880] - £960)$  £1,920.

**Party Specific** – assuming all Parties have a separate provider this could mean that 68 separate networks could incur investigations costs. If there were 10 vendor networks this will result in an increased cost of  $([960 \times 10 = £9,600] - £960)$  £8,640.

### **Procurement Costs:**

Procurement Costs below are only estimates. based on assumptions and scenarios detailed and should not be used as any basis for decisions about these options. They only factor Procurement costs and no associated costs from external parties have not been factored in. The costs are also based on these setups being put in place post the BSC Agreement and therefore no termination costs have been highlighted.

**Multi Party** - a suggested figure using the current BSC Fixed Cost as a base (circa £7.5 million) and adding **50%** (current variable element is predicted to be a 50% increase, but this is variable and therefore an estimate). We would then need to add the individual orders to this cost.

**Party Specific** - option, it is impossible to put any estimates on the overall cost of a new contract but it's unlikely to decrease from current one even by removing scope as the BSC Agent will need to change Central Systems and will either have no Service Levels in this area or charge to back this risk off. Sum of costs will be **more than £7.5million** for the whole BSC Agreement.

ELEXON has recently re-negotiated the full BSC Services Agreement (of which the High Grade Services are a part) and it would be costly to exit from this agreement.

### **3.2.4 Question 2**

National Grid were asked to determine the cost to Balancing Services that may arise from any changes to the way communications are delivered into the BSC Central Systems. Additionally National Grid was asked to identify if there were any security of supply issues associated with such changes.

National Grid responded that they believed that this modification is **not** expected to have any implications on security of supply, as the loss of the ability to submit contracts should not affect the availability of plants to National Grid. NG concluded that P227 would reduce the imbalance costs and the findings support the BSC Objectives. Detailed analysis can be found as National Grid Analysis in the [Second Consultation](#) (Section 2.4 and Appendix 6).

## **3.3 Group's Conclusions**

The Group considered both their own analysis and the independent analysis and concluded that:

- In terms of the multiple service providers, the Group believes that the more service providers involved, the less efficient resolution of communication failures becomes. Under the current arrangement, if there is a communications failure, only ELEXON needs to be contacted rather than several service providers, who would each have to investigate whether the fault occurred within their network;
- The Group is uncertain whether the communications model used by the stock exchange (SE) would be the most appropriate model for multiple service providers. The Group noted that the nature of the SE and BSC arrangements are fundamentally **different**. For example, if the communications system is down, for BSC Parties who are unable to submit notifications, they may be exposed to the Imbalance Charges. However, for a SE, if the trading system fails, no one can trade at all, They all lose the opportunities to trade for the outage period but are not directly exposed to an equivalent risk such as the Imbalance Charges create. Therefore the Group concluded that the SE model is an

alternative way that comms could be provided, but that the nature of the transactions was different on a SE and contract notifications;

- The Group believe that the independent report answers the questions posed by Ofgem but remain uncertain if the SE model is the most efficient and economic model for the BSC arrangements;
- In developing NETA, Ofgem and DTI considered that the **risk of 'notification failure'** should be borne by Parties through their own contractual arrangements with notification agents. The Group noted that neither P1 nor P227 remove the responsibility for risk of 'notification failure' as notification agents remain responsible for their own systems and consequences of their failure; and
- The Group considered what **incentives** there were on Parties following a communications failure and concluded that under the current arrangements, there is NO incentive on parties to trade to balance their position. Conversely, under the P227 solution, parties remain incentive to balance. (please refer to Appendix 4 of [Second Consultation](#))

## 4 WHAT DOES INDUSTRY THINK?

As part of assessment of P227, two consultations were issued (please refer to Attachment 3 and 4). This section summarises the comments from the industry as well as the Group's responses accordingly. The industry responses (please refer to Attachment 5) from the two consultations were both **unanimous** in their **support** for the solution.

The first consultation ([Requirement Spec & Consultation](#)) contains the Group's various considerations on cost benefit analysis, the appropriateness of 'Sunset Clause', Implementation Date and Legal Text.

The [Second Consultation](#) document contains additional analysis, conducted by the Group and by an independent consultancy, regarding alternative ways to provide communications. This information was requested after the Group had issued the first P227 consultation.

### 4.1 Comments and Responses

Below is the summary of responses from industry as part of the two Assessment Phase Consultations. Detailed responses can be found as Attachment 5 of this report.

#### Central Communications network

One of the Group members had some further observations on the question of whether there always be a central element to the comms network, and whether this actually mattered given the ability to re-define the party system boundary to be the edge of the ECVA system as is now. Analysys Mason confirmed that under all their proposed models there will always be an element of the communications network that will be provided centrally, and beyond the control of individual parties. For this reason, and to ensure future proofing of the P227 solution to changes in comms provisions, the P227 solution provides for the boundary between central systems and parties' systems to be defined in the CRD in so that it can be changed if the boundary were to change following a new comms solution to be introduced.

If future technology provided for a solution that did not require a central element, then the boundary could simply be defined to coincide with the existing ECVA system boundary part.

#### No cost socialisation

A respondent noted that there is no **cost socialisation** or **detrimental impact** to any BSC Party from P227 being implemented as P227 would enable a party to resubmit the contract notifications it could not submit due to a failure of the centrally provided communication services. This fairly prevents the party from facing imbalance costs (in such situations) but does not impose any costs on the rest of the Market. The Group agreed with this observation.

#### CRD or Code

One respondent considers that removing the boundary definition from the Code reduces clarity and transparency and doesn't meet the BSC objectives as well as the original proposal. The Group's view on this is that having the definition in the CRD rather than the code will:

- still ensure any change is consulted upon;
- allow more flexibility to move boundaries for any future changes;
- avoid any BSC change; and
- remove the requirement for a Sunset Clause.

Thus the Group concluded that the boundary definition should be in the CRD.

## Planned Outage

One respondent feels the proposal (deliberately) does not address planned outages. Analogies with stock exchanges and some other non-24/7 trading systems do not consider the fact that those systems can undertake maintenance and upgrade outside hours of active usage.

This issue has been actually documented as 'Related Operational Matters' in Section 6 of [Requirement Spec & Consultation](#)? The Group believe that this Modification is seeking to address the issue of a comms failure and not any matters relating to planned outages. Any solution to address planned outages may vary from that required for communication failures. There is a risk that in seeking to address other operational matters could jeopardise the success of the Modification and the issue it specifically seeks to address. A Party may raise a separate Modification if it believes there is a defect regarding submission of notifications during a planned outage.

## Black-box recorder

One respondent suggested that a technical solution to notification issues is possible in the form of a centrally provided 'black box recorder', possibly as a pair with uninterruptible power supply. This could buffer notifications at all times and send them after a communications or central systems failure or outage. Such an arrangement would require a BSC modification but would remove outage concerns.

The Group had a discussion on this issue before, and they believe that if the black-box fails, there still appears to be a comms failure, which means P227 is ultimately required to cover this comms media. The Group don't believe this solution can address the defect raised by P227, and P227 does not seek to address any technical issue.

## Group Conclusion

The Group concludes that, there are other ways to deliver communications but that this Modification will cater for any changes to provision of communications services. The analysis and Group observations arising from this analysis is contained in Section 2 of [Second Consultation](#) for information.

## 5 WHAT ARE THE GROUP'S CONCLUSIONS?

The Group agreed that P227 seeks to address a defect in the current arrangements, whereby the inability for Parties to resubmit data as a result of a failure of the Central communications system disadvantages the innocent party.

The **UNANIMOUS** view of the Modification Group is that the Proposed Modification **WOULD** better facilitate the achievement of Applicable BSC Objectives (b) and (c) and **WOULD NOT** better facilitate the achievement of Applicable BSC Objective (d) when compared to the current Code baseline. The Group agreed that the Proposed Modification would have a neutral impact on Applicable BSC Objective (a)

### 5.1 Costs-Benefits Analysis and BSC Objectives

#### Costs of Communications Failure

In Section 4 of the first consultation (included as Attachment 3), the Group carried out analysis based on the potential costs arising from a communications failure (using historical data submitted into ECVA) and concluded that:

- The main risk a Party bears is that a communications failure would expose them to Imbalance charges for Settlement Periods immediately following the failure, if they had needed to contract to balance in the short term; and
- The material impact of not being able to submit notifications varies depending on the Settlement Period in which a communications failure occurs.

#### Cost changes for providing Communications using differing providers

As a result of a change in the Group's Terms of Reference the Group we tried to establish some figures for the potential change in costs if communication services were delivered differently. In Appendix 4 of [Second Consultation](#), estimates for changes in Operational and Procurement costs are indicated. The Group observed that there are increased contract costs for agreeing multiple contracts, implementation costs and operational costs arising from other communications models.

#### Benefits

Appendix 4 of [Second Consultation](#) sets out the Group's view on the benefits for the current and alternative models in terms of security, resilience, risk and freedom of choice.

The Group established the following benefits against the Applicable **BSC Objectives**.

- the System Operator analysis (Appendix 6 of Attachment 2) supported the view that there would be a financial benefit under Applicable BSC Objective (b).
- the inability to submit notifications arising from a failure of the centrally provided communications network means Parties are exposed to imbalance charges and therefore increased risk that they would face potentially substantial costs (through no fault of their own). The ability to resubmit under P227 removes the additional risk burden, better facilitating new entry and competition (Objective c).
- the majority of the Group agreed there would be a marginal detrimental impact on Objective (d) but this was substantially outweighed by the benefits under Objectives (b) and (c).

Overall the Group felt the benefits, particularly under competition, outweighed the concerns over efficiency.

### 5.2 Proposed Changes to CRD and Legal Text

The boundary of responsibility for communications between Parties and Central Systems will be defined in the Communications Requirements Document (CRD) (please refer to Attachment 1).



In the draft Legal Text, the definition of 'party system boundary' has been amended so that the definition itself will now fall within the CRD. This is in accordance with the Modification Group's decision to amend the draft legal text (and the CRD) in order to provide greater flexibility and allow future boundary definition changes (i.e. to another service provider) in the comms arrangements without the need for another Modification. Draft Legal Text which is included as Attachment 2.

### Group Conclusion

If the boundary of responsibility for communications is changed in future, the definition for the boundary of responsibility will be amended in the Communications Requirements Document. The P227 solution is therefore robust to any future changes in the provision of communications by allowing for the definition of 'centrally provided communication network' to be revised.

## 5.3 Implementation Date

The Group agreed that P227 should be implemented 5WDs after an Authority decision. A Group member stated that they disagreed in principle with having open ended decision dates. However there is no material reason why an open ended date should not be used and the Group concluded that 5WDs from the Authority decision was appropriate for this specific change.

## 5.4 Conclusions and Recommendation

On the basis of the above assessment, the final conclusions of the Modification Group are:

- The Group has not identified any alternative solution that better facilitates the BSC objectives when compared to the Proposed solution either as a result of the analysis undertaken by the Group or that of the independent consultants.
- The analysis of all the communication models conceived by the Group, and the independent consultants, indicated that there will always be a central element for communication services. Hence the P227 solution is required to complement these models.
- The Group considered the fact that currently the 'Notification System Incident' is robustly defined. Were the boundaries to be redefined in future, due to the systems being provided under a different communications model, then the legal text drafting reflects that it is only the centrally provided part that is subject to enabling Party's to resubmit their contract notifications. The exact definition of this boundary in each case is to be included in the Communication Requirements Document (please refer to Attachment 1). If the boundary of responsibility for communications is changed in future, the definition for the boundary of responsibility will be amended in the Communications Requirements Document. The P227 solution is therefore robust to any future changes in the provision of communications by allowing for the definition of 'centrally provided communication network' to be revised. Therefore no Sunset Clause is necessary.
- The Group conducted its own analysis and considered independent analysis on how else communication services could be provided and concluded that, whilst these services could be delivered differently, the Group still remain uncertain if the SE model is the most efficient and economic model for the BSC arrangements. This information is complementary to their considerations on P227 as the P227 solution supports any of the communication models without bias. The work and conclusions are included in Section 2 of [Second Consultation](#).

The Modification Group therefore agreed a **UNANIMOUS** recommendation to the Panel that the Proposed Modification **should** be made.

## 6 TERMS USED IN THIS DOCUMENT

Other acronyms and defined terms take the meanings defined in Section X of the Code.

Acronym/Term	Definition
ECVAA	Energy Contract Volume Aggregation Agent
CRD	Communications Requirements Document
SO	System Operator
HG	High Grade
TMS	Transaction management service

### 6.1 References

Ref.	Document Title	Owner	Issue Date	Version
1	<a href="#">P227 Modification Proposal</a>	N/A	24/09/2008	1.0
2	<a href="#">P227 IWA</a>	ELEXON	03/10/2008	1.0
3	<a href="#">P227 Requirement Spec &amp; Consultation</a>	ELEXON	03/11/2008	1.0
4	<a href="#">Ofgem Letter to BSC Panel</a>	N/A	13/11/2008	2.0
5	<a href="#">P227 Second Consultation</a>	ELEXON	04/02/2009	1.0

## APPENDIX 1: DRAFT LEGAL TEXT

Draft legal text for the Proposed Modification is attached as a separate document, Attachment 2.

## APPENDIX 2: PROCESS FOLLOWED

Copies of all documents referred to in the table below can be found on the BSC Website at: [P227](#)

Date	Event
24/09/08	Modification Proposal raised by APX
09/10/08	IWA presented to the Panel
13/10/08	First Assessment Procedure Modification Group meeting held
20/10/08	Second Assessment Procedure Modification Group meeting held
21/10/08	Joint Consultation & Requirements Specification issued for BSC Agent/Party/Party Agent/BSCCo impact assessments Request for Transmission Company analysis issued
14/11/08	Consultation and Impact Assessment responses due
19/11/08	Third Assessment Procedure Modification Group meeting held
08/12/08	Forth Assessment Procedure Modification Group meeting held
26/01/09	Fifth Assessment Procedure Modification Group meeting held
04/02/09	Second Consultation issued for BSC Agent/Party/Party Agent/BSCCo impact assessments
17/02/09	Second Consultation responses due
12/03/09	Assessment Report presented to the Panel

ESTIMATED COSTS OF PROGRESSING MODIFICATION PROPOSAL <sup>3</sup>	
Meeting Cost	£3,000
Legal/Expert Cost	£12 K (independent analysis)
Impact Assessment Cost	£ 0
ELEXON Resource	131 man days £28 K

The above costs have changed from those provided in the IWA Report.

<sup>3</sup> Clarification of the meanings of the cost terms in this appendix can be found on the BSC Website at the following link:  
[http://www.elexon.co.uk/documents/Change\\_and\\_Implementation/Modifications\\_Process\\_-\\_Related\\_Documents/Clarification\\_of\\_Costs\\_in\\_Modification\\_Procedure\\_Reports.pdf](http://www.elexon.co.uk/documents/Change_and_Implementation/Modifications_Process_-_Related_Documents/Clarification_of_Costs_in_Modification_Procedure_Reports.pdf).

**MODIFICATION GROUP MEMBERSHIP**

Member	Organisation	13/10/08	20/10/08	19/11/08	08/12/08	26/01/09	19/02/09
David Jones	ELEXON (Chairman)	Y	Y	Y	Y	Y	Y
Bu-Ke Qian	ELEXON (Lead Analyst)	Y	Y	Y	Y	Y	Y
Ian Moss	(Proposer)	Y	Y	Y	Y	Y	Y
Andrew Colley	Scottish & Southern Energy	Y	Y	Y	Y	Y	Y
Chris Stewart	Centrica	Y	Y	Y	N	Y	N
Gary Henderson	SAIC	Y	Y	Y	Y	Y	Y
Claire Maxim	E-ON	Y	Y	N	N	N	N
Esther Sutton	E-ON	N	N	Y	Y	P	Y
Bill Reed	npower	Y	Y	N	Y	Y	Y
Neil Rowley	National Grid	N	N	Y	Y	Y	N
Attendee	Organisation						
Florienne Roach	ELEXON (Lawyer)	Y	Y	N	Y	Y	N
Nicholas Brown	ELEXON (Lawyer)	N	N	N	N	Y	N
Steve Francis	ELEXON (Design Authority)	Y	Y	N	Y	Y	Y
Tabish Khan	ELEXON (Service Delivery)	Y	Y	Y	N	N	Y
Paul Brodrick	ELEXON (Service Delivery)	N	N	P	P	N	N
Paul Pettitt	ELEXON (Service Delivery)	N	N	P	N	N	N
John Guest	LOGICA	Y	Y	Y	Y	N	N
Richard Holmwood	Ofgem	N	N	Y	N	N	N
Raihana Braimah	Ofgem	Y	Y	Y	Y	Y	N
Benjamin Nunn	Ofgem	N	N	N	N	N	Y
Garry Metcalf	Analysys Mason	N	N	N	N	P	N
Oisín Fouere	Analysys Mason	N	N	N	N	P	N

**P = PART MEETING**

## **MODIFICATION GROUP TERMS OF REFERENCE**

### **Terms of Reference (Version 2.0)**

#### **Appendix for Modification Proposal P227**

**Modification Proposal P227 will be considered by the Settlement Standing Modification Group in accordance with the SSMG Terms of Reference and the Appendix attached.**

#### **P227 – Extension of The Definition Of ECVAAs Systems**

##### **Assessment Procedure**

- 1.1 The Modification Group will carry out an Assessment Procedure in respect of Modification Proposal P227 pursuant to section F2.6 of the Balancing and Settlement Code.
- 1.2 The Modification Group will produce an Assessment Report for consideration at the BSC Panel Meeting on 11 December 2008.
- 1.3 The Modification Group shall consider and/or include in the Assessment Report as appropriate:
  - Identify the ECVAAs resubmissions process:
    - Benefits and costs of a resubmission process;
    - Confirm if the resubmission process should fully mirror the current resubmission process;
    - Ensure the appropriate assurance that only valid notifications would be resubmitted;
  - Define the boundary for extension of the 'system failure' and describe the definition of the 'system failure'
  - Analyse the impact of historic communications failures;
    - Identify the volume of the contracts which failed to be processed and the resultant Imbalance charges;
    - Identify the frequency of such failures occurring;
  - Identify impacts on:
    - ECVAAs Systems;
    - Party Systems/Party Agents Systems;
    - BSCCo processes;
  - Appropriateness and the criteria of a 'Sunset Clause'
  - Quantification of the benefits/disadvantages P227;
  - Qualitative assessment of impacts on greenhouse emissions;
  - Consider the Alternative for broader authority for manual resubmission and other Alternatives;
  - Whether the Proposed and Alternative solutions better meet the Applicable BSC Objectives.
  - Any impact on contractual terms.
  - Analysis and consideration of the additional information set out in the [Ofgem Letter to BSC Panel](#) of 7 November 2008.

## APPENDIX 3: RESULTS OF ASSESSMENT PROCEDURE CONSULTATION

### First Assessment Procedure Consultation

6 responses (representing 41 Parties and 0 Non-Parties) were received to the P227 Assessment Procedure consultation.

A summary of the consultation responses is provided in the table below (bracketed numbers represent the number of Parties and non-Parties represented by respondents).

Q	Consultation question	Yes	No
1.	Do you believe Proposed Modification P227 would better facilitate the achievement of the Applicable BSC Objectives?	6	0
2.	Please detail any impacts on your systems and processes and associated costs for you to implement P227	0	6
3.	Do you agree with the definition of the boundary for responsibility of a Communications failure for communications on the High Grade Service?	6	0
4.	Do you agree with the definition of the boundary for responsibility of a Communications failure for communications on the Low Grade Service?	6	0
5.	Do you agree that the resubmission process should mirror that process used for ECVVA System failures?	6	0
	Do you agree that Parties should have 1WD to notify ELEXON if they believe there is a Communications Failure?	5	1
6.	Do you agree with the observations of the Group regarding the potential impacts of a communication failure?	6	0
	Have you been materially impacted as a result of the inability to submit notifications due to a communication failure (any associated volumes or resultant charges should be provided and can be marked as confidential)?	3	3

## Second Assessment Procedure Consultation

7 responses (representing 44 Parties and 1 Non-Parties) were received to the P227 Assessment Procedure consultation.

A summary of the consultation responses is provided in the table below (bracketed numbers represent the number of Parties and non-Parties represented by respondents).

Q	Consultation question	Yes	No	Neutral
1.	The Group concluded that there would always be a central element of communication services, hence P227 is required.  Do you agree?	7	0	0
2.	The Group believed that the ability to revise the definition of the boundary for the centrally provided communication services negates any perceived need for a Sunset Clause.  Do you agree?	6	0	1
3.	Do you agree with the Group's original views that P227 better meets the Applicable BSC Objectives?	7	0	0
4.	Do you believe that the Legal Text delivers the solution?	5	1	1
5.	Are there any further comments on P227 that you wish to make?	5	2	0

## APPENDIX 4: RESULTS OF IMPACT ASSESSMENT

Please refer to Section 8 of [P227 Requirement Spec & Consultation](#)