



30 April 2001

**INITIAL ASSESSMENT OF
MODIFICATION PROPOSAL P8**

**Introduction Of A Price Adjuster
In The Calculation of the SBP and
SSP Prices**

Prepared By ELEXON Limited

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1 INTRODUCTION

This Report has been prepared by ELEXON Ltd. on behalf of the Balancing and Settlement Code Panel ('the Panel'), in accordance with the terms of the Balancing and Settlement Code ('BSC'). The BSC is the legal document containing the rules of the balancing mechanism and imbalance settlement process and related governance provisions. ELEXON is the company that performs the role and functions of the BSCCo, as defined in the BSC.

An electronic copy of this document can be found on the BSC website, at www.elexon.co.uk

2 EXECUTIVE SUMMARY

This modification was raised in order to consider an enduring solution to the modifications made as a result of the Urgent Modification - Correction Of Price Spikes Generated By De-Minimis NGC Purchasesm (P3). The solution to P3 was to make no changes to the Balancing and Settlement Code (BSC), but involved alterations to NGC's Balancing Services Adjustment Data (BSAD) Methodology, the Central Service Provider's processes and ELEXON procedures. It was introduced an interim solution to avoid making changes to the BSC.

This modification proposes to retain the same Price Adjuster functionality, but to implement it within the BSC and Central Service Provider's processes and systems

An initial assessment of Modification Proposal P8 has identified the following potential areas of impact and issues to be considered:

- the main area of impact will be on the physical systems and the submission, storage and reporting of the new Sell Price Adjuster (SPA)/Buy Price Adjuster (BPA) data items;
- there are also impacts on Parties' associated processes and systems due to the proposed reporting of the above SPA/SBA data within the current Settlement Reports;
- there is an impact on the Balancing and Settlement Code, the System Buy Price (SBP)/System Sell Price (SSP) Imbalance Price calculation and subsidiary documentation; and
- It should be noted that there may be other issues with the price calculation process which could be causing some of the unpredictable behaviour of the SBP/SSP Imbalance Prices.

Therefore, it is recommended that the Modification Proposal is progressed as follows:

- through the Assessment Procedure (as defined in the BSC, section F, paragraph 2.6);
- the Assessment Report be submitted to the Panel Meeting on 26th July 2001;
- other issues associated with potential SBP/SSP Imbalance Price distortions should be presented for consideration at the panel sub committee, the Imbalance Settlement Group (ISG). If any other changes that are subsequently identified, could be considered for amalgamation at a later date with the P8 Modification.

3 PURPOSE AND SCOPE OF THE REPORT

Section F of the BSC sets out the procedures for progressing proposals to amend the BSC (known as 'Modification Proposals'. These include procedures for proposing, consulting on, developing, evaluating and reporting to the Authority on potential modifications.

The BSC Panel is charged with supervising and implementing the modification procedures. ELEXON provides the secretariat and other advice, support and resource required by the Panel for this purpose. In addition, if a modification to the Code is approved or directed by the Authority, ELEXON is responsible for overseeing the implementation of that amendment (including any consequential changes to systems, procedures and documentation).

When a new proposal to modify the BSC is made, it is the responsibility of the Panel to determine how it should be progressed. Options include submitting the proposal to a Definition Procedure¹, submitting it to an Assessment Procedure², amalgamating the proposal with another proposal³, or proceeding directly to the Report Phase⁴. With a view to assisting the Panel in taking this decision, ELEXON prepares this initial written assessment of the implications of the Modification Proposal as soon as reasonably practicable after the proposal is made⁵. ELEXON endeavours to complete this initial assessment such that it can be reviewed by the Panel at the Panel meeting at which the relevant Modification Proposal is first to be considered.

This initial assessment provides a preliminary view on the following:

- the potential impact of the proposed modification on BSC systems and processes;
- the potential impact of the proposed modification on other systems and processes used by Parties;
- the potential impact of the proposed modification on the BSC, Code Subsidiary Documents and Core Industry Documents;
- the potential impact of the proposed modification on ELEXON;
- the potential impact of the proposed modification on BSC financial arrangements & budget;
- the potential impact of the proposed modification on BSC Agent contractual arrangements;
- The process and timetable that should be adopted for the progression of the Modification Proposal, in light of its complexity, importance and urgency; and
- Issues that will need to be considered and addressed in progressing the Modification Proposal (including the potential need for impact assessments, consultation and analyses).

It should be noted that, as this document only represents a preliminary assessment of the Modification Proposal, the information contained herein will, in most cases, be superseded by the subsequent analysis and reports produced by the Modification Group to which the Panel assigns the proposal for consideration.

¹ see BSC F2.5

² see BSC F2.6

³ see BSC F2.3

⁴ see BSC F2.7

⁵ see BSC F2.1.8

4 DETAILS OF THE MODIFICATION PROPOSAL

A copy of the Modification Proposal form, as submitted by its Proposer, can be found at Annex 1 to this report. The form contains the following information provided by the Proposer in relation to the proposal⁶:

- the name of the Proposer;
- the name of the representative of the Proposer (and his alternate) who shall represent the Proposer in person;
- a description (in reasonable but not excessive detail) of the issue or defect which the proposed modification seeks to address;
- a description (in reasonable but not excessive detail) of the proposed modification and of its nature and purpose;
- where possible, an indication of those parts of the Code which would require amendment in order to give effect to (and/or would otherwise be affected by) the proposed modification and an indication of the nature of those amendments or effects;
- the reasons why the Proposer believes that the proposed modification would better facilitate achievement of the Applicable BSC Objective(s) as compared with the then current version of the Code;
- where possible, an indication of the impact of the proposed modification on Core Industry Documents; and
- where possible, an indication of the impact of the proposed modification on BSC Systems and on other relevant computer systems and processes used by Parties.

This modification was raised in order to consider an enduring solution to the modifications made as a result of the Urgent Modification - Correction Of Price Spikes Generated By De-Minimis NGC Purchasesm (P3). The solution to P3 was to make no changes to the Balancing and Settlement Code (BSC), but involved alterations to NGC's Balancing Services Adjustment Data (BSAD) Methodology, the Central Service Provider's processes and ELEXON procedures. It was introduced an interim solution as a Workaround (W024), to avoid making changes to the BSC.

This modification proposes to retain the same Price Adjuster functionality, but to implement it within the BSC and Central Service Provider's processes and systems, therefore replacing Workaround W024.

Although a relatively straight forward amendment to the price calculation formula, it introduces new data items and would therefore require a number of extensive changes within the central systems. There will also be impacts on Parties' associated processes and systems.

It should be noted that there are other potential issues with the price calculation mechanism. However, this document only addresses the modification described in the P8 Modification Proposal.

⁶ See BSC F2.1.2

5 IMPACT ON BSC SYSTEMS AND PROCESSES

BSC System / Process	Potential Impact of Proposed Modification
Registration	No impact identified
Contract Notification	No impact identified
Credit Checking	No impact identified
Balancing Mechanism Activities	Two new data items to be provided by NGC and changes to SBP/SSP calculation
Collection and Aggregation of Metered Data	No impact identified
Supplier Volume Allocation	No impact identified
Settlement	Two new data items to be provided by NGC and changes to SBP/SSP calculation
Clearing, Invoicing and Payment	No impact identified
Reporting	Changes to Balancing Services Adjustment Data (BSAD) data within the Settlement Report (SAA-I014)
Dispute Resolution	No impact identified

6 IMPACT ON OTHER SYSTEMS AND PROCESSES USED BY PARTIES

System / Process	Potential Impact of Proposed Modification
SO and Party Systems	All interfaces and processes involving the Settlement Report (SAA-I014) flow may be subject to change

7 IMPACT ON DOCUMENTATION

7.1 Impact on Balancing and Settlement Code

BSC Section	Potential Impact of Proposed Modification
A: Parties and Participation	No impact identified
B: The Panel	No impact identified
C: BSCCo and its Subsidiaries	No impact identified
D: BSC Cost Recovery and Participation Charges	No impact identified
E: BSC Agents	No impact identified
F: Modification Procedures	No impact identified
G: Contingencies	No impact identified
H: General	No impact identified
I: Not Used	No impact identified
J: Party Agents	No impact identified
K: Classification and Registration of Metering Systems and BM Units	No impact identified
L: Metering	No impact identified
M: Credit Cover and Credit Default	No impact identified
N: Clearing, Invoicing and Payment	No impact identified
O: Communications	No impact identified

BSC Section	Potential Impact of Proposed Modification
P: Energy Contract Volumes and Metered Volume Reallocations	No impact identified
Q: Balancing Mechanism Activities	Section Q6.3 describes the BSAD data and its submission. It would need to be changed to describe the two new data items.
R: Collection and Aggregation of Metered Data from CVA Metering Systems	No impact identified
S: Supplier Volume Allocation	No impact identified
S: ANNEX S-1 Performance Levels and Supplier Charges	No impact identified
S: ANNEX S-2 Supplier Volume Allocation Rules	No impact identified
T: Settlement and Trading Charges	Sections T4.4.5 and T4.4.6 describe the calculation of SBP / SSP and need to include the new terms for BPA/SPA.
U: Provisions Relating to Settlement	No impact identified
V: Reporting	Change to add new BSAD items to existing list of BSAD items
W: Trading Queries and Trading Disputes	No impact identified
X: Definitions and Interpretation	No impact identified
X: ANNEX X-1 General Glossary	No impact identified
X: ANNEX X-2 Technical Glossary	Updated to describe the definition of the new BSAD data items BPA and SPA

7.2 Impact on Code Subsidiary Documents

Code Subsidiary Document	Potential Impact of Proposed Modification
BSC Procedures	No impact identified
Codes of Practice	No impact identified
BSC Service Descriptions	No impact identified
Party Service Lines	No impact identified
Data Catalogues	Changes to the Settlement Report (SAA-I014) Interface Definitions (all 3 variants)
Communication Requirements Documents	No impact identified
Reporting Catalogue	The Settlement Reports describe the BSAD data and will need to incorporate the new data items.

7.3 Impact on Core Industry Documents

Core Industry Document	Potential Impact of Proposed Modification
Grid Code	No change will be required to the Grid Code. However a change will be required to the BSAD Methodology Statement, produced in accordance with Condition 7B of the Transmission Licence.
MCUSA	No impact identified
Supplemental Agreements	No impact identified
Ancillary Services Agreements	No impact identified
Master Registration Agreement	No impact identified
Data Transfer Services Agreement	No impact identified
British Grid Systems Agreement	No impact identified
Use of Interconnector Agreement	No impact identified
Pooling and Settlement Agreement	No impact identified
Settlement Agreement for Scotland	No impact identified
Distribution Codes	No impact identified
Distribution Use of System Agreements	No impact identified
Distribution Connection Agreements	No impact identified

8 IMPACT ON OTHER CONFIGURABLE ITEMS

Item	Potential Impact of Proposed Modification
None identified at this stage	

9 IMPACT ON ELEXON

Area of Business	Potential Impact of Proposed Modification
ELEXON Systems	The Trading Operations systems (TOMAS and MID) used within Elexon will need to store these new data items. In addition the Elexon Web site will need to publish the new BPA/SPA values along with the other BSAD values.
ELEXON Procedures	Replacement of the Modification Proposal (P3) workaround (W024) will reduce the level of SBP/SSP price checking required after every Settlement Run. This work around requires SAA to provide NGC with the volume terms used in the SBP/SSP price calculations. This in turn allows NGC to return to SAA modified BSAD data, where the existing BCA/SCA terms are modified to achieve the same effect as if the BPA/SPA values had actually been within the SBP/SSP equations used by SAA. As the volume terms can change between each Settlement Run type, the resulting prices need checking.
ELEXON Contracts (Excluding BSC Agent Contracts)	No impact identified at this stage
Other (e.g. costs, staffing, etc.)	No impact identified at this stage

10 IMPACT ON FINANCIAL ARRANGEMENTS AND BUDGET

The financial impact of this modification has not been identified at this stage. However, it is anticipated that there will be contractual changes with the Logica Consortium to modify the Settlement Administration Agent (SAA) systems, and resultant operation of those systems and services.

11 IMPACT BSC AGENT CONTRACTUAL ARRANGEMENTS

BSC Agent Contract	Potential Impact of Proposed Modification
Logica Consortium (BMRA, CRA, CDCA, SAA, ECVAA, TAA(CVA))	The new BPA/SPA data items will need delivered from NGC to both the BMRA and SAA systems. They will need to be input and stored before being used in calculations. In addition the SAA system will then need to publish the new data items within the Settlement Report (SAA-I014) flow (3 variants)
EPFAL (FAA)	No impact identified
ESIS (TAA(SVA))	No impact identified
Cap Gemini (SVAA)	No impact identified
PwC (BSC Auditor, Certification Agent)	No impact identified
EASL (Teleswitch Agent, Profile Administrator)	No impact identified

12 PROCESS AND TIMETABLE FOR PROGRESSING THE PROPOSAL

ELEXON recommends that this Modification Proposal is progressed through the Assessment Procedure. Assessment is recommended recognising the potential impact of changes to:

- Central Service Providers services and systems and the related development needed; and
- Parties' associated processes and systems due to the proposed reporting of the SPA/SBA data within the current Settlement Reports.

Furthermore, it is recommended that the Modification Group that considered Urgent Modification – Correction Of Price Spikes Generated By De-Minimis NGC Purchases (P3) be utilised to assess the issues raised within the P8 Modification Proposal. It is proposed that the Assessment Report to be provided to the Panel meeting on 26th July 2001.

In addition, ELEXON recommends that the other issues associated with the SBP/SSP Imbalance Price mechanism should be presented for consideration at the panel sub committee, the Imbalance Settlement Group (ISG). This should be done as a matter of urgency with a view that further changes could to be amalgamated with the P8 Modification at a later date.

13 ISSUES

If Modification Proposal P8 is implemented as currently specified, then the following issues have been identified:

- To store additional data items for each period will probably require database changes within the Central Service Providers processes and systems. These changes are believed to be extensive and potentially have a wide impact; and
- The full implementation of the BPA/SPA Price Adjusters will also require changes to some of the SAA report formats (SAA-I014 flow) and this would have a subsequential impact on Party processes and systems.

Additionally, it is also believed that there are a number of other issues with the calculation of SBP/SSP Imbalance Prices:

- The original P3 Modification Group was attended by over 20 people and there was a strong consensus that there should be a wider review of the causes of potential price spikes, once the immediate problem of the option fees in the BSAD data was addressed as an emergency modification;
- Investigation of the accumulated live data has shown that there are other factors that seem to be affecting prices. One such issue is the effect of de-minimus Bids/Offers being created within the Central Systems, due to requirement for NGC to specify Bid/Offer acceptance times to the nearest minute; and
- It is proposed that modelling the effects of the above issues using the existing live data would be required to support any further proposed changes.
- Therefore it is proposed that the other issues associated with the SBP/SSP Imbalance Price mechanism should be presented for consideration at the panel sub committee, the Imbalance Settlement Group (ISG).

ANNEX 1 – MODIFICATION PROPOSAL – P8

Modification Proposal	MP No: P8 <i>(mandatory by BSCCo)</i>
Title of Modification Proposal <i>(mandatory by proposer):</i> Introduction Of A Price Adjuster To Reflect Option Fees For Balancing Services Contracts In Setting System Buy Price And System Sell Price.	
Submission Date <i>(mandatory by proposer):</i> 20 April 2001	
Description of Proposed Modification <i>(mandatory by proposer):</i> The recent Modification (P3) implemented a Price Adjuster for System Sell Price and System Buy Price by altering the Balancing Services Adjustment Data Methodology and implementing workaround W024. This modification proposes to retain the same functionality, but to implement the Price Adjuster within the BSC and Elexon's central systems. This would be achieved by removing Option Fees from the calculation of Buy Cost Adjustment and Sell Cost Adjustment as described in the Balancing Services Adjustment Data Methodology. Two new variables are then introduced, Buy Price Price Adjuster and Sell Price Price Adjuster. These variables are calculated by dividing the option fees by the total contracted capability. The Price Adjusters are then added on to the System Buy Price or System Sell Price. This modification will need to be mirrored by a corresponding change to the Balancing Services Adjustment Data methodology.	
Description of Issue or Defect that Modification Proposal Seeks to Address <i>(mandatory by proposer):</i> The setting of System Buy Price and System Sell Price was originally defined in the BSC and calculated using the audited central systems. The price adjuster was subsequently implemented via the Balancing Services Adjustment Data and workaround W024 as this change could be implemented more quickly. This modification would restore the original intention of imbalance prices being defined in the BSC and calculated by the central systems.	
Impact on Code <i>(optional by proposer):</i> Modifications required to definition of System Buy Price and System Sell Price in Section T Paragraph 4.4 of the Code with corresponding changes to the glossary.	
Impact on Core Industry Documents <i>(optional by proposer):</i> None	
Impact on BSC Systems and Other Relevant Systems and Processes Used by Parties <i>(optional by proposer):</i> The software calculating System Sell Price and System Buy Price and the form of the Balancing Services Adjustment Data will need altering.	
Impact on other Configurable Items <i>(optional by proposer):</i> National Grid's Balancing Services Adjustment Methodology Statement will also be need to be changed.	

Modification Proposal	MP No: P8 <i>(mandatory by BSCCo)</i>
<p>Justification for Proposed Modification with Reference to Applicable BSC Objectives <i>(mandatory by proposer):</i></p> <p>This proposal improves the transparency of calculating System Sell Price and System Buy Price and moves the process into the central systems. It therefore meets the objective of "promoting efficiency in the implementation and administration of the balancing and settlements arrangements."</p>	
<p>Details of Proposer:</p> <p style="padding-left: 40px;">Name: John Greasley</p> <p style="padding-left: 40px;">Organisation: National Grid</p> <p style="padding-left: 40px;">Telephone Number: 024 7642 3190</p> <p style="padding-left: 40px;">Email Address: john.greasley@uk.ngrid.com</p>	
<p>Details of Proposer's Representative:</p> <p style="padding-left: 40px;">Name: John Greasley</p> <p style="padding-left: 40px;">Organisation: National Grid</p> <p style="padding-left: 40px;">Telephone Number: 024 7642 3190</p> <p style="padding-left: 40px;">Email Address: john.greasley@uk.ngrid.com</p>	
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<p>Attachments: NO</p> <p>If Yes, Title and No. of Pages of Each Attachment:</p>	