

MODIFICATION REPORT for Modification Proposal P173

'Revised Settlement Arrangements for Emergency Instructions'

Prepared by: Pricing Standing Modification Group

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This document has been distributed in accordance with Section F2.1.10¹ of the Balancing and Settlement Code.

RECOMMENDATIONS

Having considered and taken into due account the contents of draft P173 Modification Report, the Balancing and Settlement Code Panel recommends:

- **that Proposed Modification P173 should not be made;**
- **that Alternative Modification P173 should not be made;**
- **an Implementation Date for Proposed and Alternative Modification P173 of 5 Working Days after an Authority decision; and**
- **the proposed text for modifying the Code, as set out in the Modification Report.**

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¹ The current version of the Balancing and Settlement Code (the 'Code') can be found at <http://www.elexon.co.uk/bscrelateddocs/BSC/default.aspx>

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SUMMARY OF IMPACTED PARTIES AND DOCUMENTS

The following parties/documents have been identified as being impacted by Modification Proposal P173.

Parties	Sections of the BSC	Code Subsidiary Documents
Suppliers <input checked="" type="checkbox"/>	A <input type="checkbox"/>	BSC Procedures <input checked="" type="checkbox"/>
Generators <input checked="" type="checkbox"/>	B <input type="checkbox"/>	Codes of Practice <input type="checkbox"/>
Licence Exemptable Generators <input checked="" type="checkbox"/>	C <input type="checkbox"/>	BSC Service Descriptions <input checked="" type="checkbox"/>
Transmission Company <input checked="" type="checkbox"/>	D <input type="checkbox"/>	Service Lines <input type="checkbox"/>
Interconnector <input checked="" type="checkbox"/>	E <input type="checkbox"/>	Data Catalogues <input checked="" type="checkbox"/>
Distribution System Operators <input type="checkbox"/>	F <input type="checkbox"/>	Communication Requirements Documents <input type="checkbox"/>
Non-Physical Traders <input type="checkbox"/>	G <input checked="" type="checkbox"/>	Reporting Catalogue <input checked="" type="checkbox"/>
Party Agents		
Data Aggregators <input type="checkbox"/>	H <input type="checkbox"/>	MIDS <input type="checkbox"/>
Data Collectors <input type="checkbox"/>	I <input type="checkbox"/>	Core Industry Documents
Meter Operator Agents <input type="checkbox"/>	J <input type="checkbox"/>	Grid Code <input type="checkbox"/>
ECVNA <input type="checkbox"/>	K <input type="checkbox"/>	Supplemental Agreements <input type="checkbox"/>
MVRNA <input type="checkbox"/>	L <input type="checkbox"/>	Ancillary Services Agreements <input type="checkbox"/>
BSC Agents		
SAA <input checked="" type="checkbox"/>	M <input type="checkbox"/>	Master Registration Agreement <input type="checkbox"/>
FAA <input type="checkbox"/>	N <input type="checkbox"/>	Data Transfer Services Agreement <input type="checkbox"/>
BMRA <input checked="" type="checkbox"/>	O <input type="checkbox"/>	British Grid Systems Agreement <input type="checkbox"/>
ECVAA <input type="checkbox"/>	P <input type="checkbox"/>	Use of Interconnector Agreement <input type="checkbox"/>
CDCA <input type="checkbox"/>	Q <input checked="" type="checkbox"/>	Settlement Agreement for Scotland <input type="checkbox"/>
TAA <input type="checkbox"/>	R <input type="checkbox"/>	Distribution Codes <input type="checkbox"/>
CRA <input type="checkbox"/>	S <input type="checkbox"/>	Distribution Use of System Agreements <input type="checkbox"/>
Teleswitch Agent <input type="checkbox"/>	T <input type="checkbox"/>	Distribution Connection Agreements <input type="checkbox"/>
SVAA <input type="checkbox"/>	U <input type="checkbox"/>	BSCCo
BSC Auditor <input type="checkbox"/>	V <input checked="" type="checkbox"/>	Internal Working Procedures <input checked="" type="checkbox"/>
Profile Administrator <input type="checkbox"/>	W <input type="checkbox"/>	Other Documents
Certification Agent <input type="checkbox"/>	X <input checked="" type="checkbox"/>	Transmission Licence <input type="checkbox"/>
MIDP <input type="checkbox"/>		System Operator-Transmission Owner Code <input type="checkbox"/>
Other Agents		
SMRA <input type="checkbox"/>		
Data Transmission Provider <input type="checkbox"/>		

X = Identified in Report for last Procedure
 N = Newly identified in this Report

1 DESCRIPTION OF PROPOSED MODIFICATION AND ASSESSMENT AGAINST THE APPLICABLE BSC OBJECTIVES

1.1 Modification Proposal

Modification Proposal P173 'Revised Settlement Arrangements for Emergency Instructions' (P173, Reference 1) was raised on 25 August 2004 by National Grid Transco (NGT). P173 seeks to amend the treatment of Emergency Instructions in Settlement. It is the intention of the Proposer that P173 would apply on a prospective basis only (i.e. would not be applicable to Emergency Instructions issued prior to the Implementation Date).

1.1.1 Current Arrangements

Under the current baseline, in accordance with Section Q5.1.3 (b) of the Balancing and Settlement Code (the 'Code'), an Emergency Instruction issued in respect of a BM Unit under the Grid Code is classed as an Acceptance for the purpose of Settlement. The Code does not contain provisions for applying an alternative price to Acceptances issued as a result of an Emergency Instruction. Therefore, the Lead Party of the affected BM Unit will be paid (or pay) for the Acceptance resulting from an Emergency Instruction at the prevailing Bid/Offer price.

In accordance with the Balancing Principles Statement (Reference 2), the Transmission Company issues Acceptances on an economic basis (i.e. by selecting Bids or Offers in order of relative cost to the Transmission Company until the required balancing volume has been obtained). However, in extreme situations, such as in the case of an Emergency Instruction², it is necessary for the Transmission Company to consider factors other than cost. As a result, it is possible that the Acceptance associated with an Emergency Instruction may be at a prevailing Bid/Offer price which is significantly higher (in terms of relative cost to the Transmission Company) than would have been selected under normal operation.

In summary, Acceptances resulting from Emergency Instructions are not distinguished from other Acceptances within Settlement. As a consequence, the Acceptance Volume resulting from an Emergency Instruction will have the following effect:

- The Lead Party of the affected BM Unit will either be paid (or pay) for the Acceptance at the prevailing Bid/Offer price via the Period BM Unit Cashflow;
- As a result of the impact on the Period BM Unit Cashflow for the Lead Party of the affected BM Unit, there will be an impact on Balancing Services Use of System (BSUoS) charges for all Parties; and
- The Acceptance Volume will feed into the Energy Imbalance Price calculation at the prevailing Bid/Offer price. This may, subject to the existing tagging rules, impact imbalance payments, and consequentially Residual Cashflow Reallocation Cashflow (RCRC), for all Parties.

1.1.2 Modification Proposal P173

Under P173, Acceptances resulting from Emergency Instructions would be distinguished within Settlement as a 'Contingency Provision' (existing Contingency Provisions are set out in section G of the Code and include, amongst other things, Black Start Periods and Manifest Errors) and treated as follows:

² Note that Emergency Instructions are taken as an emergency measure to preserve the integrity of the System and that in such circumstances it may be necessary to depart from normal Balancing Mechanism operation. The provisions relating to the issuing and implementation of Emergency Instructions are contained in the Grid Code (BC2.9).

- The Lead Party of the affected BM Unit would not be paid (or pay) for the associated Acceptance at the prevailing Bid/Offer price. Rather a 'replacement price' would be determined by the Panel post event;
- BSUoS payments for all Parties would reflect the 'replacement price'; and
- The Acceptance would contribute to the existing Energy Imbalance Price calculation at the 'replacement price'.

P173 proposes that the replacement price should represent the Avoidable Costs (as currently defined in Section G.2 of the Code). As such, the replacement price would represent the costs that would not have been incurred but for the changes in Exports and/or Imports caused by responding to the Emergency Instruction and would either be payable to or by the Lead Party of the BM Unit. It is intended that this approach would leave the Lead Party 'cost neutral' as a result of having responded to an Emergency Instruction.

1.1.3 History

The first Emergency Instruction was issued under NETA on 19 May 2004, details of this incident were outlined in ELEXON Circular (EL01201) and are summarised below.

On 19 May 2004, it was determined that a piece of high voltage equipment was showing signs of distress and needed to be taken out of service as soon as possible in order to prevent an unsafe situation. The location of the distressed equipment meant that it was necessary to stop Damhead Creek Power Station exporting to the Transmission System. At 12:51 BST on 19 May 2004, NGT issued an Emergency Instruction to Damhead Creek Power Station to perform a controlled shutdown and desynchronise the BM Unit as quickly as possible. The power station complied with the instruction and the equipment was isolated safely.

In this case, the prevailing Bid Price for a large proportion of the Acceptance Volume was £-9,999/MWh. NGC initially postponed submitting the Acceptance Data due to the likely Settlement implications for Market Participants. A Trading Dispute was eventually raised by Damhead Creek Power Station in order to include the Acceptance in Settlement.

The Trading Disputes Committee (TDC) heard the Trading Dispute on 19 August 2004 and agreed that a Settlement Error had occurred. The TDC directed that a Bid Acceptance should be entered into Settlement in the R3 Reconciliation Run on 15 December 2004. Inclusion of the Acceptance Data will impact the calculation of System Sell Price (SSP) for the relevant periods. ELEXON's estimate of the revised SSPs which will result from the inclusion of the Bid Acceptance is:

- -£96.68/MWh in Settlement Period 27³; and
- -£5,870.87/MWh in Settlement Period 28.

NGT has also indicated that the £3.55M cost of the Bid Acceptance and the associated impact on Incentivised Balancing Costs will result in changes to BSUoS charges for the relevant periods.

1.1.4 Process Followed

ELEXON presented an Initial Written Assessment (IWA) of P173 (Reference 3) to the Balancing & Settlement Code Panel ('the Panel') at its meeting on 9 September 2004. The Panel agreed with the recommendation that P173 be submitted to a three-month Assessment Procedure to be carried out by the Pricing Standing Modification Group (PSMG).

³ NB: A negative SSP will mean that a Party who was 'long' during the Settlement Period will pay the absolute value of SSP for its imbalance volume (rather than receive it).

During the Assessment Procedure, the PSMG met four times to discuss P173: on 14 September 2004, 11 October 2004, 12 November 2004 and 22 November 2004. To support its discussions and assess P173, the PSMG sought market participant's views through consultation and procured impact assessments from Parties, BSC Agents and the Transmission Company.

An Assessment Report (see Annex 3) was presented to the Panel at its meeting on 9 December 2004. At that meeting, the Panel agreed that P173 should be submitted to the Report Phase with a provisional recommendation that neither the Proposed Modification nor the Alternative Modification should be made.

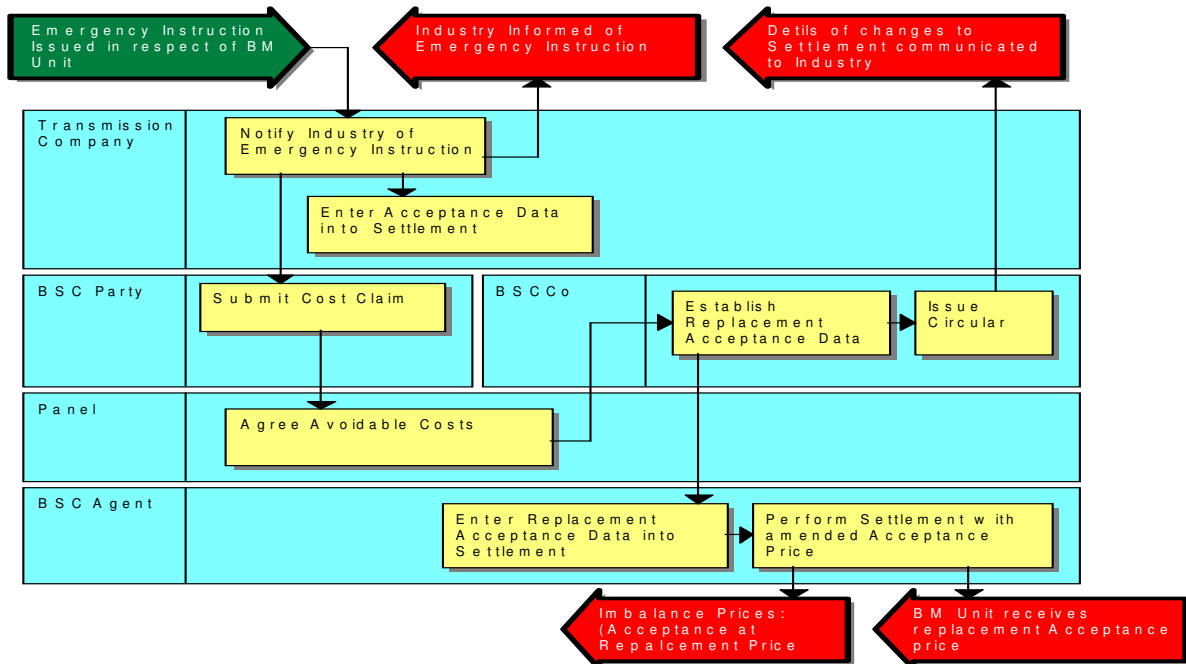
A draft Modification Report, including proposed legal text for both the Proposed and the Alternative Modification, was issued on 16 December 2004 with responses due on 23 December 2004. The draft report and the responses received were presented to the Panel at its meeting on 13 January 2004. At the meeting, the Panel confirmed its provisional recommendation that neither the Proposed Modification nor the Alternative Modification should be made.

See section 3 for further details regarding the Panel's recommendation and section 6 for a summary of the consultation responses received.

It should be noted that Modification Proposal P171 'Retrospective removal of Emergency Instructions taken for System reasons from Imbalance Price' (P171, Reference 4), Modification Proposal P172 'Removal of Emergency Instructions taken for System reasons from Imbalance Price' (P172, Reference 5) and P175 'Development of Provisions Related to Certain Bid-Offer Acceptances Issued Pursuant to the Grid Code (e.g. BC2.9 and BC2.10)' (P175, Reference 6) also seek to amend the treatment of Emergency Instructions within Settlement and were considered by the PSMG in parallel with P173. P171, P172 and P175 are considered in separate documents.

1.2 Proposed Modification

The PSMG developed and refined the Modification Proposal into a full end-to-end solution. The diagram below provides an overview of each of the elements in the Proposed Modification.



Details of each element of the Proposed Modification are provided in section 1.2.2 of the Assessment Report.

1.3 Issues raised by the Proposed Modification

The following issues were considered during the assessment of Proposed Modification P173:

- Circumstances under which an Emergency Instruction may be issued;
- Solution Development;
- Impact on Energy Imbalance Prices;
- Impact on 'Pay as Bid' Principle;
- European Convention of Human Rights;
- Interaction with related Modification Proposals; and
- Potential Alternative Modifications.

With the exception of the interaction with other Modification Proposals, these issues are discussed in the Assessment Report and are not covered further here.

1.3.1 Interaction with other Modification Proposals

This section outlines at a high level the similarities and differences between the key elements of P171, P172, P173, P175 and the associated Alternative Modifications.

	P171 & P172	P173	P175
Implementation	Retrospective (P171) Prospective (P172)	Prospective	Prospective
Scope	Emergency Instructions (Proposed & Alternative)	Emergency Instructions (Proposed & Alternative)	Emergency Instructions & Intertrips
Prevailing Acceptance price within Imbalance Price Calculation	BOA un-priced in cash out (Proposed)	BOA at Avoided Costs (Proposed)	BOA replaced by BOA that would have been taken in absence of action
	BOA replaced by BOA that would have been taken in absence of action (Alternative)	BOA priced at amended Avoided Costs (Alternative)	
Volume within Imbalance Price Calculation	Included as "System" volume (Proposed)	BOA volume in cash out (Proposed & Alternative)	BOA volume in cash out
	BOA volume in cash out (Alternative)		
Payment to affected Party under BSC	Party paid (pays) prevailing Bid/ Offer Price (Proposed & Alternative)	Party paid (pays) for BOA at Avoided Costs (Proposed)	Party may claim costs
		Party paid (pays) for BOA at amended Avoided Costs (Alternative)	
Compensation	N/A	N/A	Affected Party able to make compensation claim under BSC (when not able to under other arrangements)

Table 1: Interactions

The PSMG noted that there were elements of each proposal which were similar and result in a number of combinations which, depending on the legal drafting developed, could in theory be implemented together. These were considered by the PSMG as follows:

P171 and P172 (Proposed and Alternatives)

P171 and P172 have the same requirements, with the element of retrospection the only difference between the two proposals; hence the possibility of both proposals being implemented together has not been considered.

Retrospective Element of P171

It was noted that P171 has a retrospective element; the PSMG considered whether it would be possible to implement P171 for historic Emergency Instructions only, whilst implementing another proposal as an ongoing solution (effectively 'turning off' P171 prospectively). However, it was recognised that in order to do this the enduring change would need to amend the P171 baseline (effectively amending or overwriting sections of the Code which do not currently exist), since the legal drafting of a Modification Proposal must be against the current baseline this approach is not feasible. Therefore, in order to achieve this outcome, a Modification Proposal would have to be raised against the P171 baseline following an Authority decision on P171.

P171/P172 Proposed and P175

Proposed Modifications P171 and P172 require that Acceptances resulting from Emergency Instructions be tagged as un-priced in the Energy Imbalance Price calculation. P175 requires that the same Acceptances are replaced, for the purpose of the Energy Imbalance Price calculation, with Acceptances that would have been taken in the absence of the Emergency Instruction. This different treatment within the Energy Imbalance Price calculation is incompatible; therefore P171/2 Proposed Modifications are incompatible with P175. In addition the scope of P175 extends to intertrips.

P173 Proposed/Alternative and P175

P173 requires that Parties affected by an Emergency Instruction would receive Avoidable Costs (or amended Avoidable Costs under the Alternative) incurred in responding to the instruction. Under P175 affected Parties would recover cost incurred via a claim for compensation. Therefore, P173 Proposed and Alternative Modifications are incompatible with P175. In addition the scope of P175 extends to intertrips.

P171/P172 Alternative and P175

Alternative Modifications P171 and P172 require that Acceptances resulting from Emergency Instructions are replaced, for the purpose of the Energy Imbalance Price calculation only, with Acceptances that would have been taken in the absence of the Emergency Instruction. P175 requires the same treatment of Emergency Instructions within the Energy imbalance Price calculation but includes additional elements (such as removal of the BM Unit Cashflow for the instruction and introduction of a compensation claim process). Since P175 would deliver the changes to the Energy Imbalance Price calculation proposed under P171/2 Alternative, with the exception of the retrospective element of P171 as considered above, there is no logical reason for implementing both P175 and P171/2 Alternative Modifications. In addition the scope of P175 extends to intertrips.

P173 Proposed/ Alternative and P171/P172 Alternative

P173 proposes that the prevailing Bid/ Offer price of an Acceptance resulting from an Emergency Instruction is adjusted to represent the Avoidable Costs incurred in responding to that Emergency Instruction. Alternative Modifications P171 and P172 require that Acceptances resulting from Emergency Instructions are replaced, for the purpose of the Energy Imbalance Price calculation only, with Acceptances that would have been taken in the absence of the Emergency Instruction. These replacement processes would be applied to separate elements of the Settlement Process and are theoretical compatible. However, in order to create a solution which was robust to either of the proposals being implemented in parallel or individually, the drafting would need to specify which

proposal took precedence in certain calculations (for example where to use the P173 Avoidable Cost based replacement price and when to use the P171/P172 replacement Acceptances). The PSMG considered a number of approaches which would allow this to be achieved. However, it was not possible to identify an approach which would not jeopardise P173 as a standalone Modification. Therefore, the legal drafting developed for P173 does not allow parallel implementation with Alternative Modifications P171/2.

P173 Proposed/ Alternative and P171/P172 Proposed

P173 proposes that the prevailing Bid/ Offer price of an Acceptance resulting from an Emergency Instruction is adjusted to represent the Avoidable Costs incurred in responding to that Emergency Instruction. Proposed Modifications P171 and P172 require that the same Acceptances be tagged as un-priced in the Energy Imbalance Price calculation. These two individual changes would be achieved via amendment of separate sections of the Code. It is possible that both changes could be made with the following effect:

- Acceptance price is amended to reflect Avoidable Costs;
- For the purpose of the BM Unit Cashflow the Acceptance is priced to reflect Avoidable Costs, affected Parties therefore receive Avoidable Costs as payment for the Bid/ Offer; and
- For the purpose of the Energy Imbalance Price calculation the Acceptance is tagged as un-priced. As a result the Acceptance is not included in the weighted average which sets the Energy Imbalance Price.

Therefore, P171/2 Proposed Modifications are theoretically compatible with P173 and the legal drafting developed allows the changes to be implemented in parallel.

Conclusion:

Table 2 below illustrates the feasible combinations of Modification Proposals as identified by the PSMG and reflected in the legal drafting developed.

	P171 Pro	P171 Alt	P172 Pro	P172 Alt	P173 Pro	P173 Alt	P175
P171 Pro					Y	Y	N
P171 Alt					N	N	N
P172 Pro					Y	Y	N
P172 Alt					N	N	N
P173 Pro	Y	N	Y	N			N
P173 Alt	Y	N	Y	N			N
P175	N	N	N	N	N	N	

Table 2: Compatible proposals

The PSMG developed legal text which allows certain combinations of proposals as set out in table 2. However, it was the view of the PSMG that, whilst certain combinations of Modifications Proposals may be possible, it could not be considered that such a combination had been fully assessed (since a combination of proposals presents an entirely different outcome than any of the proposals when considered independently as required by the Modification Procedures). As such, it was the view of the PSMG that all the Modification Proposals should be viewed as mutually exclusive.

1.4 Assessment of Proposed Modification Against the Applicable BSC Objectives

The PSMG identified impacts on Applicable BSC Objectives (b), (c) and (d). The following subsections provide the PSMG's assessment against each of these objectives.

1.4.1 Applicable BSC Objective (b)

Applicable BSC Objective (b) is as follows:

"The efficient, economic and co-ordinated operation by the Transmission Company of the Transmission System."

The majority of the PSMG expressed a concern that P173 may detract from achievement of Applicable BSC Objective (b). By removing the possibility of payments at 'extreme' Bid-Offer Prices for Emergency Instructions, P173 may provide an incentive for the System Operator to issue more Emergency Instructions than would otherwise be the case. However, the Proposer disagreed with this view, noting that the Grid Code clearly sets out the limited circumstances under which Emergency Instructions may be issued.

A minority, represented by the Proposer, believed that P173 would facilitate achievement of Applicable BSC Objective (b). By ensuring that costs incurred in responding to Emergency Instructions would be adequately compensated, P173 would reduce any potential disincentive to respond to Emergency Instructions where the Bid-Offer Price did not fully reflect the Avoidable Costs. However, the majority of the PSMG disagreed, noting that the Grid Code provides an obligation to respond to Emergency Instructions irrespective of commercial considerations and that the Bid/Offer Price would be more likely to include all the perceived costs and risks associated with responding to Emergency Instructions.

1.4.2 Applicable BSC Objective (c)

Applicable BSC Objective (c) is as follows:

"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."

The majority of the PSMG identified several negative impacts on Applicable BSC Objective (c). First, the compensation of affected Parties for their Avoidable Costs, rather than paying them 'as bid', would be detrimental to Parties because it would be less 'cost-reflective'. Second, replacement of 'pay as bid' with Avoidable Costs places a requirement on affected Parties to produce a potentially complex and time consuming cost estimate even though they have already submitted Bid/Offer Prices. Finally, the potentially lengthy process required to establish the replacement acceptance price would delay the calculation of Energy Imbalance Prices for the affected Settlement Periods. This delay would introduce uncertainty into the market.

A minority, represented by the Proposer, believed that P173 would better facilitate achievement of Applicable BSC Objective (c). Energy Imbalance Prices are intended to represent the cost of energy balancing actions. The current treatment of Emergency Instructions in Settlement may result in actions taken for 'System' reasons significantly distorting Energy Imbalance Prices. This introduces the possibility of Parties being exposed to Energy Imbalance Prices that are unrepresentative of the energy balancing actions taken by the System Operator. P173 would reduce this potential exposure to unrepresentative Energy Imbalance Prices. In addition, by pricing Emergency Instruction Acceptances at Avoidable Costs, P173 would remove the possibility of 'windfall' gains and losses in emergency situations.

1.4.3 Applicable BSC Objective (d)

Applicable BSC Objective (d) is as follows:

"Promoting efficiency in the implementation and administration of the balancing and settlement arrangements."

The majority of the PSMG believed that P173 would detract from achievement of Applicable BSC Objective (d). P173 would introduce a new, complex, and potentially lengthy process for establishing a replacement acceptance price for use in extremely rare circumstances. The PSMG was of the opinion that such a process was unnecessarily complex given the rarity of the event it is designed to cater for. In addition, one member believed that the Panel determination on Avoidable Costs under P173 would introduce the risk of legal challenge from affected Parties.

The Proposer noted that the definition and process for establishing Avoidable Costs was part of the existing Code baseline and not new, albeit that P173 applied it to a new set of circumstances.

1.4.4 Conclusion

The majority of the PSMG concluded that P173 would not better facilitate achievement of the Applicable BSC Objectives. However, a minority, represented by the Proposer, was of the opinion that P173 would better facilitate achievement of the Applicable BSC Objectives.

1.5 Alternative Modification

The PSMG developed an Alternative Modification based on an amended version of the definition of Avoidable Costs, but identical to the Proposed Modification in all other respects.

Under the Alternative Modification, the cost categories that are explicitly excluded from definition of Avoidable Costs under G2.1.4(e) would be included in a revised definition. Therefore, in its determination of Avoidable Costs, the Panel would additionally have regard to the following cost categories (where those costs had been demonstrably incurred):

- costs or losses in respect of damage to property (including Plant or Apparatus) or death or injury to persons;
- increases in insurance premia; and
- increases in financing costs and overhead costs.

The Alternative Modification was developed with the intention of enabling Parties affected by Emergency Instructions to receive fuller and more cost-reflective compensation.

1.6 Issues raised by the Alternative Modification

The issues raised by Alternative Modification are identical to those raised by the Proposed Modification (see section 1.4). These issues are discussed in the Assessment Report and are not covered further here.

1.7 Assessment of Alternative Modification Against the Applicable BSC Objectives

The PSMG unanimously believed that Alternative Modification P173 would not better facilitate achievement of the Applicable BSC Objectives. All PSMG members, aside the Proposer, thought so for the same reasons as the majority considered that the Proposed Modification would not better facilitate the Applicable BSC Objectives (see section 1.3). However, the Proposer did not support the Alternative Modification on the basis of the expanded set of cost categories in its definition and the potential impact of those wider costs on the replacement price.

However, by a majority, the PSMG believed that the Alternative Modification would better facilitate achievement of the Applicable BSC Objectives as compared to the Proposed Modification. The expanded definition of Avoidable Costs (e.g. possibility of including costs relating to plant damage) would enable affected Parties to receive fuller and more cost-reflective compensation.

The minority of the PSMG which did not support the Alternative Modification when compared to the Proposed Modification raised several concerns. First, that including plant damage in the definition of Avoidable Costs would represent a cross-subsidy of the generation sector by the supply sector of the industry. However, it was noted by several PSMG members that Emergency Instructions were issued for the benefit of all market participants. Second, that including broader and potentially significant costs such as insurance premiums and plant damage could lead to significant distortion of Energy Imbalance Prices. Third, the broader definition of Avoidable Costs could make the process of establishing a replacement price longer leading to prolonged uncertainty regarding Energy Imbalance Prices.

1.8 Governance and regulatory framework assessment

A member of the PSMG raised a concern that P173, with its notion of 'cost neutrality', could conceivably result in a Party being required to make a payment for responding to an Emergency Instruction. This member therefore felt that this was in contravention of Article 1 of the First Protocol of the European Convention of Human Rights. Under Article 1, the Market Participant is entitled to the free enjoyment of its 'possessions', which could include a power station. Through issuing an Emergency Instruction, the GB System Operator would be legitimately interfering with the Affected Party's use of its property. In such circumstances, for this interference to be proportionate, the European Convention on Human Rights requires that compensation is paid (although the level may not be the full market value).

The PSMG asked ELEXON to obtain external legal advice on this matter. The legal advice received indicated that an infringement was not inherent in the arrangements proposed under P173.

The legal advice received by BSCCo is contained in Annex 7 of the Assessment Report. However, the member who raised the concern still believed that an issue existed. This member's response to the legal advice is contained in Annex 8 of the Assessment Report. Further legal advice and a revised response to the initial legal advice are contained in the addendums to the Assessment. The PSMG noted the advice and the response to it, but agreed that neither altered its recommendation in respect of P173.

2 COSTS⁴

PROGRESSING MODIFICATION PROPOSAL

Meeting Cost	£500
Legal/expert Cost	£3,500 ⁵
Impact Assessment Cost	£5,000
ELEXON Resource	50 Man days £12,500

⁴ Clarification of the meanings of the cost terms in this section can be found in annex 7 of this report

⁵ This is a revised estimate from that presented in the Initial Written Assessment and includes the cost of the additional external advice that was required during the Assessment Procedure.

IMPLEMENTATION COSTS (PROPOSED & ALTERNATIVE)

		Stand Alone Cost	P173 Incremental Cost	Tolerance
Service Provider⁶ Cost	Change Specific Cost	£41.5k*	£41.5k*	£0
	Release Cost	£0	n/a	£0
	Incremental Release Cost	£0	£0	£0
	Total Service Provider Cost	£41.5k*	£41.5k*	£0
Implementation Cost	External Audit	£0	£0	+/-0%
	Design Clarifications	£0	£0	+/-0%
	Additional Resource Costs	£0	£0	+/-0%
	Additional Testing and Audit Support Costs	£0	£0	+/-0%
Total Demand Led Implementation Cost	£41.5k*	£41.5k*	+/-0%	

* Note that this cost also includes third party costs required to amend BSCCo's TOMAS system

ELEXON Implementation Resource Cost		129 Man days £28.5k	84 Man days £18.5k	+/- 10%
Total Implementation Cost		£70k	£60k	+/- 10%

ONGOING SUPPORT AND MAINTENANCE COSTS (PROPOSED & ALTERNATIVE)

	Per Emergency Instruction	Tolerance
Service Provider Operation Cost	£525 per incident	£0
Service Provider Maintenance Cost	zero	£0
ELEXON Operational Cost	£900 per incident	+/-50%

⁶ BSC Agent and non-BSC Agent Service Provider and software Costs

3 RATIONALE FOR PANEL'S RECOMMENDATIONS

By a majority, the Panel agreed a recommendation that neither the Proposed Modification nor the Alternative Modification should be made. However, the Panel unanimously agreed that, should the Authority determine that either the Proposed or the Alternative Modification be made, the Implementation Date should be 5 Working Days following any such determination.

The views expressed by the Panel for and against P173 are summarised in the following sub-sections.

3.1 Majority View

The majority of Panel members believed that neither the Proposed Modification nor the Alternative Modification would better facilitate achievement of the Applicable BSC Objectives. These Panel members were of the opinion that, by departing from the 'pay-as-bid' principle for Bid-Offer Acceptances, P173 would be detrimental to Applicable BSC Objective (c). In general, it is desirable that prices are set by the market and that intervention is kept to a minimum, especially in an 'energy only' market. Therefore, in the context of the Balancing Mechanism, honouring prices submitted by participants is an important factor in promoting effective competition in the Balancing and Settlement arrangements.

One Panel member added that the BSC was a form of contract with 'Force Majeure' provisions and that attempting to cater specifically for all possible exceptional circumstances would add unnecessary complexity.

Finally, one Panel member noted that the issuing of Emergency Instructions, in certain circumstances, might result from the absence of 'preventative' maintenance of network assets. This Panel member also raised a concern that P173 would set a precedent for the Panel determining the costs of market participants. However, BSCCo noted that the possibility already existed within the current baseline as a result of the 'Avoidable Cost' provisions contained in section G2.

3.2 Minority View

A minority of Panel members believed that the Proposed Modification would better facilitate achievement of the Applicable BSC Objectives. These Panel members were of the opinion that, by ensuring that Energy Imbalance Prices and consequential cash flows would not be distorted by emergency System actions, P173 would better facilitate achievement of Applicable BSC Objective (c). Moreover, in the context of the Lead Party responding to an Emergency Instruction, P173 would ensure that such a Party would not be subjected to either a 'windfall' gain or loss as a result. In general, these Panel members believed that Emergency Instructions were not issued under market conditions or for standard operational purposes and as such warranted different treatment in Settlement from standard Acceptances issued within the Balancing Mechanism i.e. departure from the 'pay-as-bid' principle was appropriate in the case of Emergency Instructions.

One Panel member added that the Grid Code already recognises that when an Emergency Instruction is issued it may be appropriate to depart from standard Settlement provisions. Moreover, under the BSC, comparable contingency instructions issued within the timescales of the Balancing Mechanism, such as Black Start, are priced on the basis of Avoidable Costs. Therefore, it would be appropriate to treat Emergency Instructions consistently.

Those Panel members who supported the Proposed Modification, did not support the Alternative Modification on the basis that they believed that there was no compelling reason to change the existing definition of Avoidable Costs

3.3 Further Comments

The Panel unanimously agreed that the central issue was 'pay-as-bid' and whether or not departure from that principle in the limited circumstances proposed under P173 was appropriate.

Several Panel members indicated that the arguments made by the Modification Group, for and against P173, in relation to Applicable BSC Objective (b) (i.e. in terms of incentives to issue and respond to Emergency Instructions) were not relevant or appropriate. These members noted that the Grid Code clearly set out the circumstances under which Emergency Instructions could be issued and obligations for Parties to respond to them.

The Panel members noted that P173 would apply an existing and accepted part of the Code baseline – i.e. the 'Avoidable Cost' provisions contained in Section G2.

Finally, the Panel also noted the concern raised by a Modification Group member that P173 might constitute an infringement of an affected Party's rights under the European Convention of Human Rights. However, whilst noting the concern and the legal advice received that an infringement was not inherent in the arrangements proposed under P173, the Panel agreed with the Modification Group's conclusion that no further assessment was required or appropriate.

4 IMPACT ON BSC SYSTEMS AND PARTIES

An assessment has been undertaken in respect of BSCCo, BSC Systems, and Parties and following systems and/or processes have been identified as being impacted by the Proposed Modification and the Alternative Modification.

4.1 BSCCo

The CVA Programme and CVA Operations will be required to support implementation and document the processes for dealing with Emergency Instructions. In addition ELEXON Systems Assurance will be required to support the implementation of P173.

Changes would also be required to TOMAS in order to allow prices to be calculated in accordance with the replacement price methodology. The required changes to TOMAS would incur an estimated cost of £33,700.

BSCCo may also be required to support the Panel in the determination of the Avoidable Costs associated with responding to an Emergency Instruction.

See section 8 for details of the implementation approach.

4.2 BSC Systems

No system changes would be required. However, the BSC Agent (SAA) would be required to enter Acceptance data into Settlement post event for Emergency Instructions and replace the prevailing price of the Acceptance with the replacement price at a later Settlement Run. This would require changes to documentation to formalise the process. In addition there would be an operational cost per incident for making the required data changes.

The BSC Agent Impact Assessment of P173 is contained in Annex 5 of the Assessment Report.

4.3 Parties and Party Agents

An assessment was undertaken by the PSMG in respect of systems and processes used by Parties and the following areas were identified as potentially impacted by the Modification Proposal.

System / Process	Potential Impact of Proposed Modification
Settlement Calculations	Parties may be required to amend their systems, processes and procedures to account for the amended treatment of Emergency Instructions within Settlement.
Provide information for Determining Avoidable Costs	Parties and their Agents may be required to develop systems, processes and procedures to provide information to the Panel for the Panel to determine Avoidable Costs.

5 IMPACT ON CODE AND DOCUMENTATION

5.1 Balancing and Settlement Code

An assessment was undertaken by the PSMG in respect of all Sections of the Code and the following areas have been identified as being impacted by P173:

Item	Potential Impact of Proposed Modification
G	Amending to recognise Emergency Instructions as a contingency provision.
Q	Amendments required to insert definition of 'Excluded Acceptances' and process for establishing the replacement price for such acceptances.
V	Insert requirement to report 'Emergency Acceptances' on BMRS.
X	Insert definition of 'Emergency Acceptance'.

5.2 Code Subsidiary Documents

An assessment was undertaken by the PSMG in respect of all Code Subsidiary Documents and the following documents were identified as being impacted by the Modification Proposal.

Item	Potential Impact of Proposed Modification
SAA SD	The Settlement Administration Agent (SAA) Service Description would need to be amended to reflect the adjustment of Acceptances Prices for Emergency Instructions.
BSCPs	A new process for the treatment of Emergency Instructions may be required. It may be appropriate for this to sit within an existing BSCP, alternatively a new document may be required.
NDFC	The NETA Data File Catalogue would require amendment.

5.3 Impact on other configurable items

Implementation of P173 would require changes to the following configurable items:

Item	Proposed / Alternative
SAA URS	The SAA User Requirements Specification would need to be amended to support the P173 methodology.
IDD	New interface from BSCCo to Central Systems required

5.4 Impact on Core Industry Documents and supporting arrangements

An assessment was undertaken by the PSMG in respect of Core Industry Documents and whilst no documents were identified as being impacted, the following was noted:

Item	Potential Impact of Proposed Modification
Grid Code	Although P173 would not require consequential changes to the Grid Code, it would amend the treatment in Settlement of Emergency Instructions under the Grid Code.

6 SUMMARY OF CONSULTATIONS

The P173 draft Modification Report consultation was issued on 16 December 2004 with responses due on 23 December 2004. Ten responses, representing 48 Parties, were received.

Consultation question	Respondent agrees	Respondent disagrees	Opinion unexpressed
Do you agree with the Panel's views on Proposed Modification P173 and the provisional recommendation to the Authority contained in the draft Modification Report that Proposed Modification P173 should not be made?	8(46)	1(1)	1(1)
Do you agree with the Panel's views on Alternative Modification P173 and the provisional recommendation to the Authority contained in the draft Modification Report that Alternative Modification P173 should not be made?	9(47)	0	1(1)
Do you agree with the Panel's view that the legal text provided in the draft Modification Report correctly addresses the defect or issue identified in the Modification Proposal?	3(12)	2(20)	5(16)
Do you agree with the Panel's provisional recommendation concerning the Implementation Date for P173?	7(42)	0	3(6)

6.1 Panel's Provisional Recommendation – Proposed

The majority of respondents who commented supported the Panel's provisional recommendation that the Proposed Modification should not be made. The following reasons were given:

- Departure from the principle of "pay as Bid" would be detrimental to competition;
- The requirement to disclose commercially confidential information may place Parties in breach of contract or breach of the Code;
- Parties may not be able to recover all costs incurred in responding to an Emergency Instruction, for example, consequential imbalance costs;
- Developing a proxy imbalance price will introduce unnecessary uncertainty, complexity and inefficiency to the operation of the central arrangements;
- P173 suggests that certain Bid/Offer Prices are 'inappropriate'. All prices up to £99,999 are permitted, therefore all prices up to this level are 'appropriate';

- P173 would effectively introduce a price cap for Bids and Offers that would distort and impair investment signals; and
- As a result of P173, affected Parties could potentially claim for compensation for infringement of their rights under Article 1 of the First Protocol of the European Convention of Human Rights.

One respondent, the Proposer, did not support the Panel's provisional recommendation. This respondent agreed with the minority Panel view that Emergency Instructions are not issued under market conditions or for standard operational purposes and therefore warrant different treatment in Settlement. This respondent also noted that the solution developed under P173 seeks to apply the existing provisions in Section G2 of the BSC to Emergency Instruction, specifically the provisions for dealing with Black Starts.

In response to the comment of one Panel member that an Emergency Instruction might result from the absence of preventative maintenance work, this respondent also noted that Emergency Instructions can be issued for a number of reasons, not limited to the failure of an NGC owned asset. NGC maintains Transmission System assets in England and Wales in accordance with its statutory and Licence duties. In addition the Emergency Instruction issued at Damhead Creek on 19 May 2004 was not caused by a lack of preventative maintenance.

6.2 Panel's Provisional Recommendation – Alternative

All of those respondents who expressed an opinion supported the Panel's provisional recommendation that the Proposed Modification should not be made. The reasons given by the majority of respondents were identical to those provided in relation to the Proposed Modification above.

One respondent, the Proposer, stated that it did not believe it was appropriate for the industry to underwrite the additional costs included in the Alternative Modification e.g. plant damage.

6.3 Draft Legal Text

The majority of respondents who commented, agreed that the draft legal text correctly addresses the issue or defect identified in the Modification Proposal.

One respondent disagreed on the basis that it believed that the legal text for the Alternative Modification ought to refer to 'financing costs or overhead costs' rather than just to increases in those two cost categories⁷.

One respondent disagreed, expressing the view that the legal text addresses the solution contained in the P173 Modification Report but that the solution itself does not address the defect.

One respondent noted that the legal text provided was such that it could be implemented in conjunction with Proposed Modification P171 or Proposed Modification P173.

6.4 Recommended Implementation Date

All respondents who expressed an opinion agreed with the Proposed Implementation Date for the Alternative and Proposed Modifications, of 5 Working Days following an Authority decision.

6.5 Further Comments

One respondent commented that the 'pay-as-bid' principle was essential to a competitive market.

⁷ This issue was discussed by the PSMG whilst the legal text was being developed. And on the basis of legal advice received, the text is felt to be consistent with the views of the majority of the PSMG and has therefore not been amended.

Another respondent noted that until the current arrangements are changed, all market participants will continue to face the risk that extreme prices will be applied to System Operator actions and inappropriately impact industry cash flows.

6.6 Comments and views of the Panel

The Panel noted the responses received and in particular that the respondent who disagreed with its provisional recommendation was the Proposer.

The Panel noted the proposed change to the draft legal text raised by one of the respondents. However, the Panel supported BSCCo's position that no change was necessary because the issue had already been discussed during the Assessment Procedure and that the text was consistent with the external legal advice received and the majority view of the PSMG.

7 SUMMARY OF TRANSMISSION COMPANY ANALYSIS

7.1 Analysis

The Transmission Company indicated that P173 would not affect its ability to discharge its Licence obligations, its ability to operate the Transmission System or security of supply. Furthermore, the Transmission reported that P173 could be implemented at minimal cost using existing system functionality and processes (e.g. use of Systems Warnings page on the BMRS to notify industry of an Emergency Instruction).

A copy of the Transmission Company analysis of P173 is contained in Annex 4 of the Assessment Report.

7.2 Comments and views of the Panel

The Panel noted that the Transmission Company Analysis reported that implementation of P173 would have minimal impact on its processes and systems.

8 IMPLEMENTATION APPROACH

The PSMG proposed that P173 be implemented on a Settlement Day basis and that the Implementation Date be 5 Working Days after an Authority determination.

Settlement Day Basis

Implementation on a Settlement Day basis would mean that P173 would only apply to Emergency Instructions issued on Settlement Days on or after the Implementation Date.

This approach was favoured by the PSMG because it would avoid making the change retrospective.

Lead Time of 5 Working Days

Five Working Days would provide sufficient lead time to implement the necessary Code changes. The documentation and process changes to support the amended Code obligations would then be delivered in the next available Release. Document and process changes would be delivered on 29 June 2005, if decision an Authority decision is received by 9 March 2005. Alternatively, should an Authority determination be received after this date, but on or before 6 July 2005 these changes would be delivered on 2 November 2005.

The PSMG proposed this approach to minimise the risk of an Emergency Instruction being issued prior to the Implementation Date of P173. In addition, the PSMG noted that this approach was consistent with that proposed under P171, P172 and P175.

The Panel unanimously supported the implementation proposed by the PSMG.

9 DOCUMENT CONTROL

9.1 Authorities

Version	Date	Author	Reviewer	Change Reference
0.1	14.12.04	Change Delivery	Change Delivery	Internal Review
0.2	16.12.04	Change Delivery	Interested Parties	Consultation
0.3	04.01.05	Change Delivery	Change Delivery	Second Internal Review
0.4	07.01.05	Change Delivery	Panel	Decision
1.0	19.01.05	Change Delivery	Authority	Decision

9.2 References

Ref No.	Document Title	Owner	Issue Date	Version	Hyperlink
1	Modification Proposal P173	-	25.08.2004	-	http://www.elexon.co.uk/documents/Change_and_Implementation/CVA_-_Circulars/P173.pdf
2	Balancing Principles Statement	NGC	04.10.2004	4.1	http://www.nationalgrid.com/uk/indinfo/balancing/pdfs/Appendix_B_BPS_v1.pdf
3	Modification Proposal P173 Initial Written Assessment	ELEXON	03.09.2004	1.0	http://www.elexon.co.uk/documents/BSC_Panel_and_Panel_Committees/BSC_Panel_Meetings_2004_-_082_-_Papers/82_007a.pdf
4	Modification Proposal P171	-	25.08.2004	-	http://www.elexon.co.uk/documents/modifications/171/P171.pdf
5	Modification Proposal P172	-	25.08.2004	-	http://www.elexon.co.uk/documents/Change_and_Implementation/CVA_-_Circulars/P172.pdf
6	Modification Proposal P175	-	01.10.2004	-	http://www.elexon.co.uk/documents/modifications/175/P175.pdf

ANNEX 1 LEGAL TEXT

Attachment 1a contains the legal text for Proposed Modification P173 and Attachment 1b the legal text for Alternative Modification P173.

ANNEX 2 MODIFICATION GROUP DETAILS

Membership

The membership of the PSMG for the purposes of P173 is indicated in the table below. The columns to the right provide an attendance record.

Member	Organisation	14/09	11/10	12/11	22/11
Sarah Parsons	ELEXON (Chairman)	✓	✓	✓	✓
Mark Duffield	(Proposer) P173	✓	✓	✓	✓
Garth Graham	Scottish and Southern	✓	✓	✓	✓
Man Kwong Liu	SAIC	X	X	✓	✓
Bill Reed	RWE Trading	✓	✓	✓	✓
Paul Jones	E.On Uk	✓	✓	✓	✓
Lisa Waters	Waters Wye	✓	X	X	X
Jan Devito	Jade Energy	✓	X	✓	✓
Mark Manley	BGT	x	✓	✓	✓
Helen Bray	EDF	x	✓	✓	✓
Martin Mate	British Energy	✓	X	✓	X
Roger Salomone	ELEXON (Lead Analyst)	X	✓	✓	✓

In addition to the members of Modification Group, the following persons attended one or more meetings:

Attendee	Organisation	14/09	11/10	12/11	22/11
Simon Bradbury	Ofgem	✓	✓	✓	✓
Fiona Lewis	Ofgem	✓	✓	✓	✓
Mark Brackley	National Grid	✓	✓	✓	✓
Paul Chesterman	EDF	✓	X	X	X
Adam Cooper	Entergy-Koch	✓	X	X	X
Rekha Patel	Conocophillips	✓	X	✓	X
Thomas Bowcutt	ELEXON	✓	✓	✓	✓

Sanjukta Round	Cornwall Consulting	x	X	✓	✓
Barbara Vest	GDF	x	Part	✓	X
Danielle Lane	BGT	✓	X	X	X
Keith Munday	Bizz Energy	X	X	X	✓

Terms of Reference

The Assessment Procedure Terms of Reference provided by the Panel required the PSMG to consider in relation to P173:

- **Replacement Price:** An appropriate methodology and process for calculating this replacement price;
- **Impact on Imbalance Prices:** A consideration of the implications of applying a cost neutral price to an Acceptance in terms of the calculation of Imbalance Prices and requires assessment;
- **Solution development:** Details of the process changes to support the calculation and agreement of a replacement price and the inclusion of this price in Settlement (including details of the process to be conducted by the Panel). Also the point in the Settlement/ Reconciliation process the price of the Acceptance should be amended; and
- **Background:** Details of the circumstances under which and Emergency Instruction may be issued under the Grid Code;
- **Consideration of the interaction with P172 and P172:** Details of the interaction between P171, P172 and P173; and
- **Alternative Modifications:** Details of any Alternative Modification that would better facilitate achievement of the Applicable BSC Objectives in comparison to the Proposed Modification.

ANNEX 3 ASSESSMENT REPORT

See Attachment 2

ANNEX 4 CLARIFICATION OF COSTS

There are several different types of costs relating to the implementation of Modification Proposals. ELEXON implements the majority of Approved Modifications under its CVA or SVA Release Programmes. These Programmes incur a base overhead which is broadly stable whatever the content of the Release. On top of this each Approved Modification incurs an incremental implementation cost. The table of estimated costs of implementing the Proposed/Alternative Modification given in section 2 of this report has three columns:

- **Stand Alone Cost** – the cost of delivering the Modification as a stand alone project outside of a CVA or SVA Release, or the cost of a CVA or SVA Release with no other changes included in the Release scope. This is the estimated maximum cost that could be attributed to any one Modification implementation.

- **Incremental Cost** - the cost of adding that Modification Proposal to the scope of an existing release. This cost would also represent the potential saving if the Modification Proposal was to be removed from the scope of a release before development had started.
- **Tolerance** – the predicted limits of how certain the cost estimates included in the template are. The tolerance will be dependent on the complexity and certainty of the solution and the time allowed for the provision of an impact assessment by the Service Provider(s).

The cost breakdowns are shown below:

PROGRESSING MODIFICATION PROPOSAL	
Meeting Cost	This is the cost associated with holding Modification Group meetings and is based on an estimate of the travel expenses claimed by Modification Group members.
Legal/expert Cost	This is the cost associated with obtaining external expert advice, usually legal advice.
Impact Assessment Cost	Service Provider Impact Assessments are covered by a pre-determined monthly contractual charge. Therefore the cost included in this report is an estimate based on the level of impact assessment that the modification is expected to require and may not reflect the actual cost attributed to the modification, which will be based on a percentage of the contractual impact assessment costs for each month that it is assessed.
ELEXON Resource	This is the ELEXON Resource requirement to progress the Modification Proposal through the Modification Procedures. This is estimated using a standard formula based on the length of the Modification Procedure.

SERVICE PROVIDER⁸ COSTS	
Change Specific Cost	Cost of the Service Provider(s) Systems development and other activities relating specifically to the Modification Proposal.
Release Cost	Fixed cost associated with the development of the Service Provider(s) Systems as part of a release. This cost encompasses all the activities that would be undertaken regardless of the number or complexity of changes in the scope of a release. These activities include Project Management, the production of testing and deployment specifications and reports and various other standard release activities.
Incremental Release Cost	Additional costs on top of base Release Costs for delivering the specific Modification Proposal. For instance, the production of a Test Strategy and Test Report requires a certain amount of effort regardless of the number of changes to be tested, but the addition of a specific Modification Proposal may increase the scope of the Test Strategy and Test Report and hence

⁸ A Service Provider can be a BSC Agent or a non-BSC Agent, which provides a service or software as part of the BSC and BSC Agent Systems. The Service Provider cost will be the sum of the costs for all Service Providers who are impacted by the release.

	incur additional costs.
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IMPLEMENTATION COSTS

External Audit	Allowance for the cost of external audit of the delivery of the release. For CVA BSC Systems Releases this is typically estimated as 10% of the total Service Provider Costs, with a tolerance of +/- 20%. At present the SVA Programme does not use an external auditor, so there is no External Audit cost associated with an SVA BSC Systems Release.
Design Clarifications	Allowance to cover the potential cost of making any amendments to the proposed solution to clarify any ambiguities identified during implementation. This is typically estimated as 5% of the total Service Provider Costs, with a tolerance of +/- 100%.
Additional Resource Costs	Any short-term resource requirements in addition to the ELEXON resource available. For CVA BSC Systems Releases, this is typically only necessary if the proposed solution for a Modification Proposal would require more extensive testing than normal, procurements or 'in-house' development. For SVA BSC Systems Releases, this will include the management and operation of the Acceptance Testing and the associated testing environment. This cost relates solely to the short-term employment of contract staff to assist in the implementation of the release.
Additional Testing and Audit Support Costs	Allowance for external assistance from the Service Provider(s) with testing, test environment and audit activities. Includes such activities as the creation of test environments and the operation of the Participant Test Service (PTS). For CVA BSC Systems Releases, this is typically estimated as £40k per release with at tolerance of +/-25%. For SVA BSC Systems Releases this is estimated on a Modification Proposal basis.

TOTAL DEMAND LED IMPLEMENTATION COSTS

This is calculated as the sum of the total Service Provider(s) Cost and the total Implementation Cost. The tolerance associated with the Total Demand Led Implementation Cost is calculated as the weighted average of the individual Service Provider(s) Costs and Implementation Costs tolerances. This tolerance will be rounded to the nearest 5%.

ELEXON IMPLEMENTATION RESOURCE COSTS

Cost quoted in man days multiplied by project average daily rate, which represents the resources utilised by ELEXON in supporting the implementation of the release. This cost is typically funded from the "ELEXON Operational" budget using existing staff, but there may be instances where the total resources required to deliver a release exceeds the level of available ELEXON resources, in which case additional Demand Led Resources will be required.

The ELEXON Implementation Resource Cost will typically have a tolerance of +/- 5% associated with it.

ONGOING SUPPORT AND MAINTENANCE COSTS	
ELEXON Operational Cost	Cost, in man days per annum multiplied by project average daily rate, of operating the revised systems and processes post implementation.
Service Provider Operation Cost	Cost in £ per annum payable to the Service Provider(s) to cover staffing requirements, software or hardware licensing fees, communications charges or any hardware storage fees associated with the ongoing operation of the revised systems and processes.
Service Provider Maintenance Cost	Cost quoted in £ per annum payable to the Service Provider(s) to cover the maintenance of the amended BSC Systems.

ANNEX 5 CONSULTATION REPONSES

See Attachment 3