

June 2002

ASSESSMENT REPORT
MODIFICATION PROPOSAL P62 –
Changes to Facilitate Competitive
Supply on the Networks of New
Licensed Distributors

Prepared by the VAMG Modification Group on
behalf of the Balancing and Settlement Code Panel

Document Reference	P062AR
Version no.	1.0
Issue	Final
Date of Issue	7 June 2002
Reason for Issue	For Panel Decision
Author	ELEXON

I DOCUMENT CONTROL

a Authorities

Version	Date	Author	Signature	Change Reference
0.1	27/05/02	Change Delivery		
0.2	31/05/02	Change Delivery		
1.0	07/06/02	Change Delivery		

Version	Date	Reviewer	Signature	Responsibility
0.1	27/05/02	Mods Group		
0.2	31/05/02	Change Delivery		
1.0	07/06/02	Change Delivery		

b Distribution

Name	Organisation

c Intellectual Property Rights and Copyright

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d Related Documents

The following documents are referenced from within this document using the following convention [RD/x]:

- 1 Assessment Report – Modification Proposal P70 – Version 1.0, 07 June 2002
- 2 Modification Proposal P62 - Requirements Specification – Version 1.0, 25 April 2002
- 3 New Distribution Business Focus Group Progress Report – MEC/02/01/05, 22 January 2002

II CONTENTS TABLE

I	Document Control	2
a	Authorities.....	2
b	Distribution.....	2
c	Intellectual Property Rights and Copyright.....	2
d	Related Documents.....	2
II	Contents Table	3
1	Summary and Recommendations	5
1.1	Recommendations.....	5
1.2	Background.....	5
1.3	Rationale for Recommendations.....	6
2	Introduction	7
3	Modification Group Details	7
3.1	Terms Of Reference.....	8
4	Description Of Modification	8
4.1	Current Trading Arrangements.....	8
4.2	Utilities Act 2000.....	9
4.3	Modification Proposal P62.....	10
4.4	Modification Proposal P70.....	11
4.5	Modification Scope.....	12
4.6	Related Industry Changes.....	12
4.7	Proposed Changes To Supplier Volume Allocation (SVA).....	13
4.8	Systems Impact.....	15
5	Risks, Exclusions And Assumptions	16
5.1	Risks.....	16
5.2	Exclusions.....	16
5.3	Assumptions.....	17
6	Assessment Against the Applicable BSC Objectives	18
6.1	Applicable BSC Objectives.....	18
6.2	VAMG Assessment of P62.....	19
6.3	P62 Key Issues.....	19
7	Impact on BSC and BSCCo Documentation	20
7.1	BSC.....	20
7.1.1	Defined Terms.....	21
7.1.2	Obligation Changes.....	21
7.2	Code Subsidiary Documents.....	22
8	Impact on BSC Systems	23
8.1	Central Volume Allocation Systems.....	23
8.2	Supplier Volume Allocation Agent (Development).....	23
8.3	Supplier Volume Allocation Agent (Operation).....	23
8.4	ELEXON Maintained Agent Software.....	24
8.5	Entry Processes.....	24
9	Impact on Core Industry Documents and Supporting Arrangements	25
9.1	Master Registration Agreement (MRA).....	25
9.2	Data Transfer Services Agreement (DTSA).....	25
9.3	Settlement Agreement for Scotland (SAS).....	26

9.4	Distribution Documents	26
10	Impact on ELEXON.....	26
11	Impact on Parties and Party Agents.....	27
12	Legal Issues	28
13	Summary of Representations	28
13.1	Consultation Responses.....	28
13.2	VAMG Consideration.....	29
13.2.1	Cost / Benefit of P62	29
13.2.2	Alternative Solution	30
13.2.3	Linkage To P70.....	32
13.3	Technical Questions Included in Responses	32
14	Summary of Transmission Company Analysis	34
15	Project Brief.....	35
	Annex A – Proposed Text to Modify the BSC.....	38
	Annex B – P62 Consultation Responses.....	38
	Annex C – BSC Agent Impact Assessments	38
	Annex D – Party and Party Agent Impact Assessments	38

1 SUMMARY AND RECOMMENDATIONS

1.1 Recommendations

On the basis of the analysis, consultation and assessment undertaken in respect of this Modification Proposal during the Assessment Procedure, and the resultant findings of this report, the Modification Group recommends that the BSC Panel should determine that:

The Modification Proposal proceed to the Report Phase and recommend to the Authority that the Modification Proposal be approved, with a proposed Implementation Date of 01 August 2003, if an Authority decision is received by 01 September 2002, and an Implementation Date of 30 June 2004 if an Authority decision is received after 01 September 2002 and before 30 June 2003.

The Modification Group further recommend that combination of both P62 and P70 would provide a better technical solution and hence would better facilitate the Applicable BSC Objectives.

1.2 Background

Following commencement of parts of the Utilities Act 2000 on 1 October 2001, distribution of electricity is now a distinct licensable activity, and as a result entities other than a Public Distribution System Operator (PDSO) may be obliged, or choose, to obtain Distribution Licences. This creates a requirement for new licensed distributors to be able to join the Balancing and Settlement Code (BSC), the Master Registration Agreement (MRA), and where appropriate comply with the Settlement Agreement for Scotland (SAS).

Initially the impact of these changes was considered by the Distribution Business Focus Group (DBFG), an industry group established under the MRA Executive Committee (MEC). This group examined a number of options for amending industry documents to support new licensed distributors. Following consultation with Parties to the MRA and BSC, the DBFG recommended an approach (Option 7), based on the following assumption:

one distribution business equals one SMRS, without the creation of new GSP Groups

TXU UK Ltd raised Modification Proposal P62 on 03 January 2002 in order to progress the BSC aspects of DBFG Option 7 under BSC governance.

P62 was initially progressed under the Definition Procedure and a consultation performed to seek views on the previous DBFG work and the DBFG recommendation for Option 7. The Volume Allocation Modification Group (VAMG) and consultation responses supported this recommendation. At the Panel meeting 14 March 2002 Modification Proposal P62 was submitted into the Assessment Procedure, with the completed Assessment Report to be presented to the Panel on 13 June 2002.

The VAMG met three times during the Assessment Procedure to consider P62. A Requirement Specification for P62 was produced and sent out for both Consultation and Impact Assessment. The results of these were used to construct this Assessment Report.

1.3 Rationale for Recommendations

In their consideration of P62 the VAMG noted:

- the relevant sections of the Utilities Act 2000 were already in force and that some changes within the industry were required to accommodate new licensed distributors;
- providing a solution outside the BSC would result in parallel trading arrangements and would be both inefficient and not cost effective;
- the optimal approach for the industry was a cost effective solution within the BSC.

In light of these factors the VAMG believed that Modification Proposal P62 represented the best way forward, meeting the requirement to facilitate competitive supply on the networks of new licensed distributors.

The VAMG therefore believed that P62 promotes effective competition in supply (Applicable BSC Objective (c)), by facilitating competition on these new networks, in a manner consistent with the BSC's treatment of existing networks, and consistent with the intent of the Utilities Act 2000 and the standard licenses.

Furthermore the VAMG recognised the linkage with P70 expressed by a number of Parties within their consultation responses, in particular those who:

- made their support for P62 conditional on the approval of P70;
- believed that P70 was an integral part of an overall P62 solution;

The VAMG agreed that a combination of P62 and P70 would provide a better technical solution.

2 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

3 MODIFICATION GROUP DETAILS

This Assessment Report has been prepared by the VAMG. The membership of the Modification Group during the Assessment Procedure was as follows:

Member	Organisation	Role
Justin Andrews	ELEXON	Chairman
Gwilym Rowlands	ELEXON	Lead Analyst
Phil Russell	TXU	Proposer P62
Jonathan Purdy	SEEBOARD	Proposer P70
Bob Brown	Cornwall Consulting	
Richard Harrison	Npower	
Neil Magill	Scottish Power	
Chris Pooley	Campbell Carr	
Clare Talbot	NGC	
Katherine Bergin	Scottish & Southern	
Paul Chesterman	London	
Brian Nichol	Northern	
Rob Cullender	BGT	
Paul Jones	Powergen	

In addition the following attendees have attended one or more meetings during the Assessment Procedure:

Member	Organisation	Role
Malcolm Burns	SESL	SAS Representative
Jill Ashby	MRASCo	MRA Representative
Patrick Smart	Ofgem	Authority Representative
Christina Pearson	SD Partners	
John Spiller	ABB	
Karen Lee	St Clements	
Andrew Latham	BGT	
Jan Devito	St Clements	
Tony Savka	United Utilities	
Mark Constable	IMSERV Europe	
Terry Wilkinson	St Clements	
Bruce Wyatt	Npower	
Bob Walker	Npower	
Afroze Miah	Powergen	

3.1 Terms Of Reference

The following specific terms of reference were set for the Modification Group to consider and/or include in the Assessment Report as appropriate:

- further assessment of the solution referred to as DBFG Option 7 [RD/3] where each distributor provides or procures a single Supplier Meter Registration Service (SMRS);
- the creation of a P62 Requirements Specification (based on Option 7) restricted to the issues relevant to the BSC;
- the least cost solution in implementing Option 7 with a view to the cost to the industry as a whole;
- legal and regulatory issues relating to the complexity of BSC Changes; and
- an implementation strategy for the Modification Proposal, synchronising any work with the other areas impacted by the introduction of new licensed distributors, e.g. the MRA and SAS.

4 DESCRIPTION OF MODIFICATION

4.1 Current Trading Arrangements

Prior to the introduction of the Utilities Act 2000 the only licensed distributors in England and Wales were the 12 Public Distribution System Operators (PDSO).

The current trading arrangements allow unlicensed¹ distribution networks² to be handled in one of two ways:

- a single point of connection between the Public Distribution System and the unlicensed distribution network is recorded in SMRS but none of the entry and exit points are recorded. Guidance on metering points for such a network are included in Example 19a of the MRA Schedule 9; or
- the network can be “adopted³” by the PDSO and treated for settlement and registration purposes as part of the Public Distribution System. The PDSO would record all of the entry and exit points in SMRS, and the network would therefore be open to competitive supply. Guidance on metering points for such a network are included in Example 19b of the MRA Schedule 9.

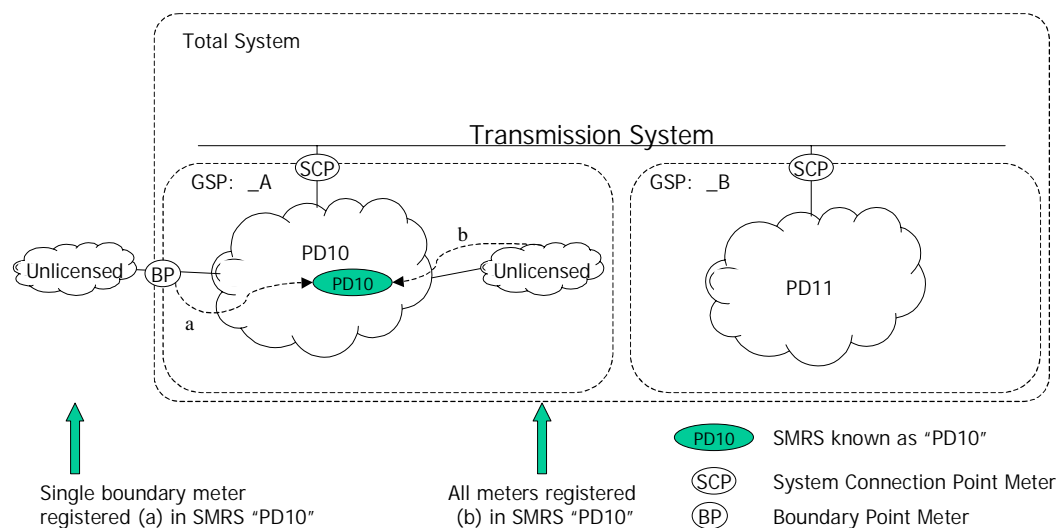
This arrangement is shown in Figure 4.1 for two sample unlicensed distribution networks.

¹ The term “private” or “independent” are also used to describe these networks

² The Electricity Act 1989 and Utility Act 2000 use the term “distribution system” to describe both licensed and unlicensed networks. In order to avoid confusion with the BSC defined term “Distribution System”, the general term “distribution network” is used within this document instead of “distribution system”. The BSC term “Distribution System” refers to that subset of distribution networks which are part of Supplier Volume Allocation, i.e. they are either own by a licensed distributor or “adopted” in line with example 19b of the MRA Schedule 9. The network “clouds” used within the figures of this document may be complete, or parts of a, distribution network.

³ The quoted term “adopted” is used within the document to describe this Settlement mechanism. Its use does not extend to consideration of any bi-lateral agreements between the distributors or any implications on the ownership or operation of the network. In this context other terms, such as “fostered”, would be equally valid.

Figure 4.1 - Current Arrangements For Unlicensed Distribution Networks



It is assumed all the meters within the PDSO cloud “PD10” are recorded in the SMRS for “PD10”. In addition the dotted line (a) shows the single boundary meter also being recorded in the SMRS for “PD10” and the dotted line (b) shows all the meters in the second unlicensed distribution network being recorded in the SMRS for “PD10”.

It should be noted that the BSC does not explicitly describe such configurations and that all agreements between the two DSO to provide such a service are bilateral, with all BSC obligations remaining on the PDSO (the only required party to the BSC).

4.2 Utilities Act 2000

Following commencement of parts of the Utilities Act 2000 on 1 October 2001, distribution of electricity is now a distinct licensable activity, and as a result entities other than a PDSO may be obliged⁴, or choose, to obtain Distribution Licences.

The obligations placed on such licensed distributors include the following:

- an obligation to prepare a schedule of Distribution Use of System charges (DUoS) and Line Loss Factors (LLF) (Condition 4);
- an obligation to become a BSC Party, if distributing electricity in England or Wales (Condition 10);
- an obligation to comply with the SAS, if distributing electricity in Scotland (Condition 12);
- an obligation to become a Party to the MRA (Condition 14).

The existing PDSOs are also issued with a Distribution Services Direction⁵ that:

- specifies a geographical Distribution Services Area;

⁴ Statutory Instrument 2001/3270 defines the class exemptions from the requirement to hold a distribution licence

⁵ The VAMG believe that in practice such directions would not be issued to new licensed distributors. However, the option of determining new Distribution Services Area and hence activating Section C obligations for new licensed distributors is still possible. It should also be noted that a PDSO’s Section C obligations only apply to networks within their Distribution Services Area.

- specifies which requirements from Section C (of the Distribution License) are to have effect within the Distribution Services Area, such as:
 - provision of an SMRS (Condition 37);
 - operation of a Data Transfer Service (Condition 38);

Changes are required to the BSC, MRA and SAS in order to allow new licensed distributors to meet these obligations, and also to enable competitive supply on these networks.

4.3 Modification Proposal P62

P62 was raised to allow new licensed Distribution Systems to be embedded within existing Public Distribution Systems, within an existing GSP Group and with all entry and exit points recorded in an SMRS.

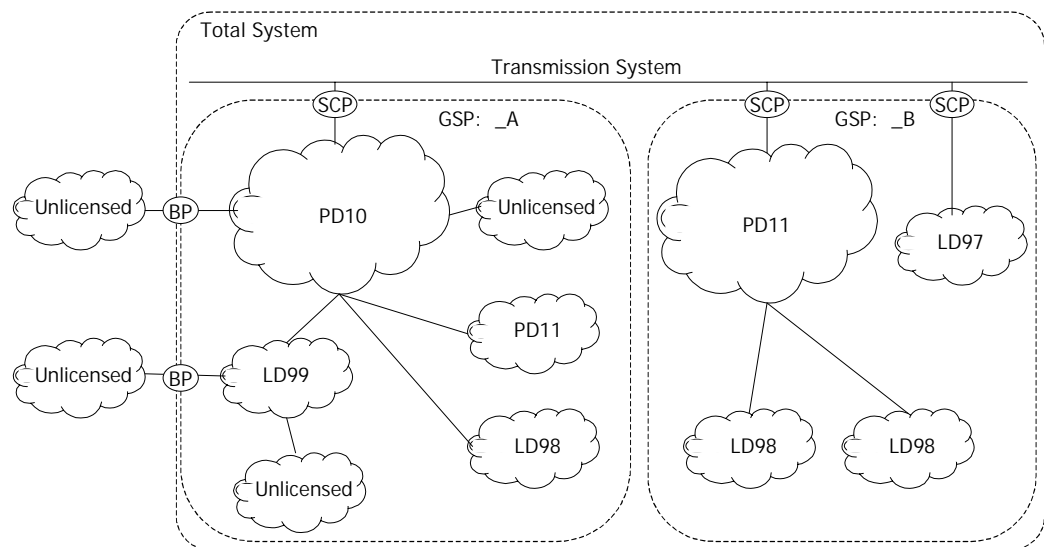
The key features of P62 and DBFG Option 7 [RD/3] can be summarised as:

- 1 distribution business equals 1 SMRS, without the introduction of new GSP Groups.

This means there is no longer a 1-1 relationship between a distributor, its SMRS and GSP Group. The 1-1 relationship remains between the Distributor and its SMRS, however, there is now a many-to-many relationship between these two entities and the GSP Group.

Figure 4.2 shows the potential for new Distribution Systems operated by new licensed distributors, along with some unlicensed distribution networks, which still do not need to be licensed. It should be noted that under P62 (DBFG Option 7) there would be five logical SMRS for such a configuration, one for each of the licensed distributors (PD10, PD11, LD97, LD98 and LD99). In addition there would be five sets of Metering Point Administration Numbers (MPAN), each starting with a different two digits, in our example these may be 10, 11, 97, 98 & 99. Further details on the implications of this are contained in [RD/2].

Figure 4.2 – Example New Licensed Distributors and Distribution Systems



The key points to note about figure 4.2 and the potential networks are:

- a new licensed distributor (LD98) may operate in multiple GSP Groups (i.e. _A and _B) and may also have multiple Distribution Systems in the same GSP Group (i.e. as in _B), each of which is independently connected to the existing PDSO;
- it is also possible for an existing PDSO (i.e. PD11) to operate in GSP Groups (i.e. _A) other than its own (i.e. as covered by its Distribution Services Area);
- a new licensed distributor (LD99) may “adopt”, or connect to, one or more unlicensed distribution networks in the same way as a PDSO can do now;
- a new licensed distributor (LD97) may decide to directly connect their Distribution System to the Transmission System. Although consideration of directly connected networks was excluded from this Modification Proposal, the VAMG recognised they needed to consider this one aspect in order to control if and when a new GSP Group may be required⁶;

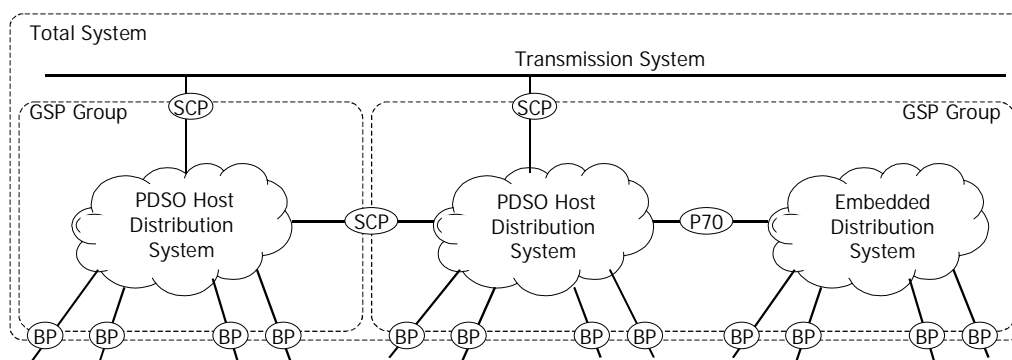
Not all of these combinations may occur, and it is unclear exactly how many new licensed distributors, or distribution networks there will be. However, the BSC needs to recognise all may occur, and hence the P62 solution must be sufficiently flexible to cope.

4.4 Relation to Modification Proposal P70

One of the key features of P62 is that for the purposes of Supplier Volume Allocation, the new Distribution Systems can be seen as extensions to the networks operated by the PDSO. All the meter readings for the current Public Distribution System, and any other Distribution Systems within the same GSP Group, are all aggregated together allowing the operation of the GSP Group Correction Factor to continue to apportion errors across a large number of Non Half Hourly metering systems.

A feature of this is that for the purposes of Settlement there is no requirement for a meter between two Distribution Systems within the same GSP Group. In Figure 4.3 such a point is labelled as “P70”. The current BSC only allows meters at System Connection Points (SCP) or Boundary Points (BP) to be installed in the Central Meter Registration Service (CMRS).

Figure 4.3 – P70 Example



As a meter is not required for Settlement, it was not included in the original scope of P62. However, it was also recognised that such a meter may have indirect benefits to Settlement (improved data quality), and would certainly be useful to the distributors

⁶ See Section 5.2 for a discussion on why the VAMG believe multiple direct connections to the Transmission System should be supported within a single GSP Group.

concerned. Hence SEEBOARD raised P70 to propose that, where Metering Equipment is installed at such points, one of the distributors may elect to have it registered in CMRS and have the data collected by the Central Data Collection Agent (CDCA). The effect of this would be that the rights and obligations in respect of the Metering Equipment and data collection would be the same as any other meter registered in CMRS.

Although P70 is independent of P62, it is being assessed in parallel with P62 and is described further in [RD/1]. It should be noted that P62 does not require P70 and hence is independent. However, this is not symmetrical and it is noted in [RD/1] that P70 can only be approved if P62 is itself approved.

Although P70 is not part of this Modification Proposal, and hence this report, a number of consultation responses made their support for P62 conditional on P70.

4.5 Modification Scope

The P62 (DBFG Option 7) solution recognises that the original Stage 2 Supplier Volume Allocation (SVA) systems were designed with the assumption that distribution businesses and their boundaries were static.

This places certain limitations on how new licensed distributors can be incorporated into the existing solution, and in particular the data structures. One example is the MPAN, which is expected to be both static, and also contain a reference to the distributor.

P62 maintains a direct link between the first two digits of the MPAN and distributor. This introduces some limitations on the ability to trade distribution businesses, especially when this involves the partial transfer of assets or networks. Other approaches, such as Option 1, which did not maintain this association were also considered by DBFG. Although it was possible that a partial transfer of assets may have had less impact, it was also recognised that these options introduced more structural change and hence would require more initial outlay and industry impact to provide a basic infrastructure. A consultation on these issues showed that the majority of respondents preferred a least impact solution, even if this maintained the association between the MPAN and the distributor and did not provide a new solution to partial transfer of networks or assets. After consideration of the responses the DBFG recommended Option 7. This decision was further endorsed as part of the P62 Definition Procedure.

It must be recognised that, without significant structural change, any proposed solution can only work within the limitations imposed by the existing data structures. In addition the proposed solution is only designed to meet the current requirements for new licensed distributors, it does not attempt to take into account changes in the way licensed distributors may operate, or any other future requirements.

4.6 Related Industry Changes

P62 is part of a larger initiative to make the necessary changes to core industry documents and systems to allow new licensed distributors to fulfil their obligations and participate within the electricity industry, in line with the changes introduced by the Utilities Act 2000.

The non-Settlement aspects of Option 7 continue to be developed outside the BSC by the DBFG, covering subjects such as:

- an avoidance of doubt document to clearly identify those obligations that apply to SMRS and those that apply to the distribution business itself. This will be used to help existing distributors develop and provide a stand alone commercial SMRS for any new licensed distributor requesting one;
- funding and voting rights of new licensed distributors within the MRA;
- commercial aspects, such as DUoS charging, changes to Distribution Use of System Agreements and Distribution Connection Agreements;
- the changes required to the MRA to recognise new licensed distributors and provide the necessary support for the topics described above.

Although a number of different industry threads are progressing in parallel, P62 differs from other areas in that it has a number of central software systems⁷ which need to be upgraded before any P62 Go-Live date and it also requires the approval of the Authority before significant development and implementation can commence.

Other areas of the industry face different challenges, such as creating framework agreements which will be commercially acceptable to new licensed distributors, associated hosting distributors and also the Authority.

As a result other areas of the industry realise that P62 is on the critical path and are expecting P62 to be approved by the Authority prior to completion of their own work. This is only natural as they do not have the lead time associated with central software development and some areas of work cannot be addressed until real applications from new licensed distributors are considered. This is reflected in the response from MRASCo.

The VAMG believe this is unavoidable, with a modification such as P62, and that it is only the Authority who have an overall appreciation of all aspects of introducing new licensed distributors and the necessary governance to consider all issues.

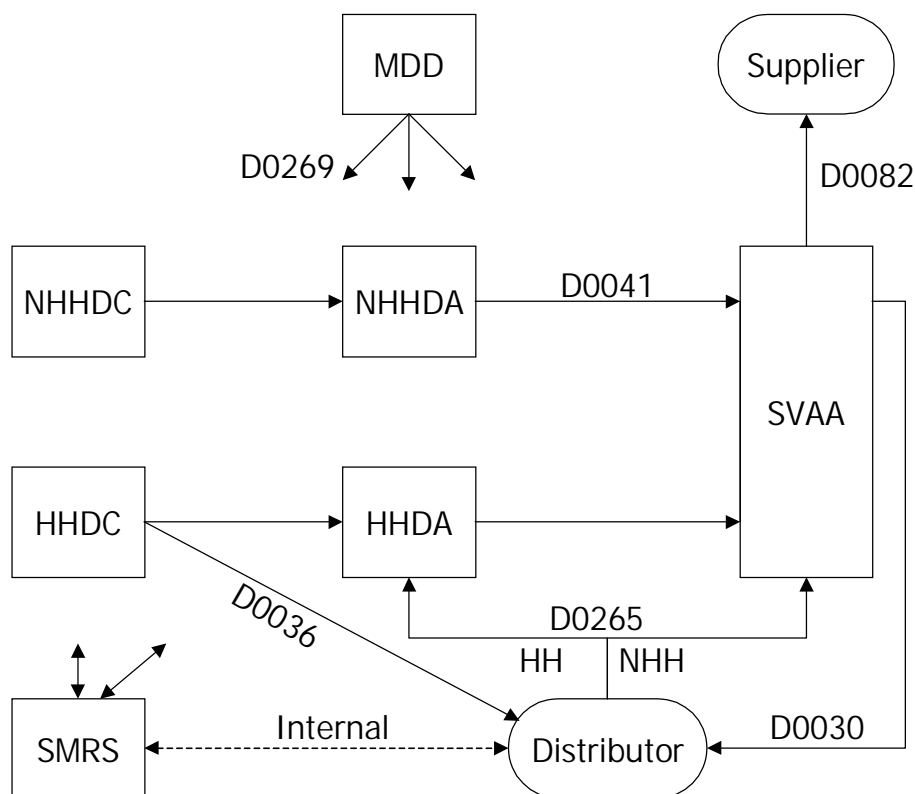
4.7 Proposed Changes To Supplier Volume Allocation (SVA)

The following section provides an overview of the proposed P62 solution, in particular the changes required to allow multiple distributors to operate within multiple GSP Groups. Figure 4.4 provides a view of the key areas and SVA data flows which are impacted by P62.

One key design point is that currently there are no planned changes to the formal definition of any of the SVA data flows, as the current version already defines the necessary groupings to represent multiple distributors per GSP Group. However the logical structure of the data within these flows will change, as some previously single instance repeating groupings will now have multiple entries.

⁷ Although other non-BSC systems must also be upgraded for P62, their timescales can be tailored to the take up in demand by new licensed distributors, or existing PDSOs operating out of area, and such timescales can also be determined on a per GSP Group basis. See section 7.1 of [RD/2] for a discussion of the different SMRS architectures that may be employed.

Figure 4.4 – Proposed Solution Overview



The key features of this proposed solution are:

- depending on the SMRS, and which GSP Group it is associated with, an existing operator of an SMRS may now be required to support multiple distributors, and/or operation in multiple GSP Groups. Prior to P62 the flows between the SMRS and distributor (shown as “Internal” in the figure) were normally within the same commercial organisation and did not need to be identified in the MRA Data Transfer Catalogue or BSC SVA Data Catalogue. Consideration of this is outside the scope of P62 and is being addressed by DBFG;
- SVA data flows, such as the Market Domain Data (MDD) flow (D0269), are already capable of holding information about multiple distributors per GSP Group. However, it is expected there will need to be a change to the MDD Application used to maintain the data;
- only the logical structure within a number of the SVA data flows is expected to change⁸ in order to reflect multiple distributors within a GSP Group:
 - the half hourly side of Settlement aggregates data into Consumption Component Classes (CCC) within the Half Hour Data Aggregator (HHDA) and makes no use of any reference to the distributor. This means the flows between the Half Hour Data Collector (HHDC), HHDA and Supplier Volume Allocation Agent (SVAA) are unaffected. Any data at a lower level than CCC (i.e. Metering System Id) must be

⁸ This does not represent a change to the physical format of the flow, it is only making use of what are existing repeating groups, that previously would have only be required to contain one entry.

obtained from information provided in the D0036, or the D0275, sent from the HHDC to the distributor;

- in contrast it is the profiling function within SVAA that determines the deemed half hourly energy consumption for the non half hour side of Settlement. To perform this function SVAA uses the core Supplier Purchase Matrix (SPM) within the D0041. This structure already contains a reference to the distributor, associated with each of the Line Loss Factor Class (LLFC), and this allows the flow to define information about multiple distributors within the SPM for each GSP Group;
- the D0265 is unique to each distributor. This means that each distributor can only submit one set of LLFC to describe all of their networks in every GSP Group. How these are allocated by each distributor is a local matter, for example some distributors may have different LLFC for their domestic meters in each GSP Group, some distributors may find they can use the same LLFC;
- as a result of the changes to the SPM within the D0041, each of the SVAA output reports which contain these entries will change, in particular the D0030 and D0082 reports. In the case of the D0030, SVAA will need to ensure each report only contains the data applicable to the target distributor.
- software will no longer be able to deduce the GSP Group from the first two digits of MPAN, and will need to obtain this information for each MPAN directly from SMRS, or indirectly as part of another flow. Although each agent receives sufficient data to cope with the loss of the 1-1 relationship between the distributor and GSP Group, it is recognised that timing issues may exist that can affect when such data is available to agents. This is an important factor and further discussed in Section 9.1 of [RD/2];
- no major changes will be required to the Central Volume Allocation (CVA) systems.

4.8 Systems Impact

P62 will impact a large number of systems, including BSC Agent Systems, Supplier Agents and other systems used by Parties. It will also affect a number of processes, such as Entry Processes and the handling of standing data exceptions.

Much of the detailed design and implementation work cannot commence until the Modification is approved by the Authority and an appropriate implementation project formed.

Part of the Assessment Procedure has been to produce a plan for the activities to take place after a positive determination by the Authority. This includes changes to:

- SVAA, MDD and the ELEXON developed Non Half Hourly Data Aggregator (NHHDA) software;
- Code Subsidiary documents, such as the BSC Procedures (BSCP) and Service Lines.

This plan also contains consideration of changes to non BSC Agent Systems, such as SMRS, HHDC, HHDA and Non Half Hourly Data Collector (NHHDC), as well as associated Supplier and distributor systems.

The Implementation Date proposed for P62 will represent the earliest date at which Settlement systems will be able to cope with new licensed distributors, or an existing PDSO

operating out of area, in the manner prescribed by P62. However, other external factors may result in a later date being the first practical date for which the BSC Systems will actually be required to provide such functionality.

5 RISKS, EXCLUSIONS AND ASSUMPTIONS

5.1 Risks

The changes in the Utilities Act 2000 are already in force. Therefore there is a risk that a new distribution license may be issued before P62 is approved and implemented. Should a new license be granted, or a PDSO attempt to operate out of area, then the licensed distributors concerned would need to initially comply with the current trading rules and the only generic solution is to have their network temporarily "adopted" within that of an existing PDSO, using bilateral agreements to address any commercial issues.

In addition once P62 was implemented then such "adopted" networks would need to be migrated to the licensed distributor and all the existing MPANs changed to that of a new P62 compliant Distribution System. This migration process is outside the scope of P62 (See section 5.2).

The integrity of Settlement relies on all MPANs in a GSP Group being registered once and only once. Having a single SMRS per distributor per GSP Group helps to facilitate this. Relaxing this constraint as part of P62 inevitably increases the risk of data exceptions. As a result in the future there may be a need to mitigate this risk by changes to the Performance Assurance Framework. This is currently outside the scope of P62 (See Section 5.3).

5.2 Exclusions

As part of the Definition Procedure four areas were identified as being outside the scope of P62, these were consulted on and agreed to be pragmatic exclusions:

- no direct connections to the Transmission System – the VAMG agreed that it is reasonable to assume that this would not occur for at least two years, and did not represent an immediate issue. Subsequent consideration during the Assessment Procedure identified a more immediate issue, this is described below;
- no registration of the metering point between two distribution networks in CMRS – this was explicitly excluded in the original Modification Proposal and has now been raised as a separate Modification Proposal P70;
- no consideration of how the LLF and DUoS for each distribution network are calculated and proportioned – the VAMG recognised that this was a complex and potentially difficult area, however, the BSC Agent Systems should assume each of these would be provided/reported as a single consolidated figure from/to the embedded distributor. The commercial arrangements for these are between the distributors concerned and the issue is being addressed by the DBFG;
- no transferring of metering points from one distribution business to another – although this is a major limitation, the VAMG recognised that the problem was not limited to new licensed distributors and that it should be addressed outside P62. This exclusion includes any explicit support for a Distributor of Last Resort.

The original Modification Proposal suggested that consideration of Distribution Systems directly connected to the Transmission System should be excluded from the scope of P62. This was in order to avoid consideration of the complex issues associated with creating new GSP Groups, and was in line with the DBFG recommendation of: "1 distribution business equals 1 SMRS, without the introduction of new GSP Groups". However, during the Assessment Procedure it became clear to the VAMG that such an exclusion could actually result in a requirement to create a new GSP Group.

For instance a new Distribution System connected at the same physical busbar as an existing GSP could be configured so that it appears to Settlement as a direct connection to the Transmission System. The current BSC drafting would mean that such a configuration would result in a new GSP Group and that the option of being considered as part of the adjacent GSP Group was not allowed. The VAMG recognised that in making changes to the definition of a Distribution System, they also needed to take into account any associated changes that should also be made to the definition of a GSP Group to make it robust to the presence of new licensed distributors. The VAMG believed that making a change to allow, but not force, such a direct connection to be part of an existing GSP Group was in line with the original exclusion, as it avoided the need to consider the complex issues associated with the creation of new GSP Groups (the underlying rationale for the original exclusion). This is further discussed in Section 3.5 of [RD/2].

This change in scope was consulted on and the majority of respondents supported the view that this was a pragmatic approach.

5.3 Assumptions

The following assumptions have been made as part of the assessment of P62:

- the treatment of new licensed distribution networks with embedded exempt Suppliers will be no different from the handling of exempt Suppliers within existing distribution networks;
- a single distribution licence will apply to all the distribution networks in Great Britain owned/operated by that licensee (i.e. that legal entity) and that the existing limit of using two digits to represent the distributor within the MPAN will be sufficient;
- the definition of "Master Registration Agreement" in distribution licences may need to be modified to permit distributors without a Distribution Services Area to be a party and to provide registration services;
- the Distribution Services Area, which originally equated to the boundaries of a GSP Group, can no longer be relied upon to define a geographical split of the country into large contiguous areas;
- any changes to the MRA can be addressed in parallel to P62, but do not need to be complete prior to the initiation of the Report Phase of P62;
- there will be a small change in volumetrics and performance as a result of P62. The DBFG decision to recommend Option 7 was based on a small number of new licensed distributors operating networks, which are small in comparison to networks of the existing PDSOs. In addition it is expected that there will also be a small number of relatively small networks being operated by existing PDSO outside their Distribution Services Area and in another GSP Group;

- other than Entry Processes, there are initially no other changes to the Performance Assurance Framework and no requirement to measure the performance of distribution businesses.

6 ASSESSMENT AGAINST THE APPLICABLE BSC OBJECTIVES

6.1 Applicable BSC Objectives

The Utilities Act 2000, recognising recent structural changes within energy markets, amends the structure and regulatory framework of the electricity supply industry. It places statutory duties on the distribution network operators similar to those on the NGC, requiring them to facilitate competition in generation and supply, to develop and maintain an efficient, co-ordinated and economical system of distribution and to be non-discriminatory in all practices. It is intended that this duty will encourage distribution network operators to ensure that generators have equitable access to distribution networks⁹.

In addition to these structural changes, the Utilities Act 2000 also changes the framework such that other entities could be required, or may choose, to apply for a distribution license and become licensed distributors. P62 was raised to make the BSC consistent with this change and the derived licenses.

However, P62 must be formally assessed in terms of the Applicable BSC Objectives¹⁰ which, unlike the modified principle objective¹¹ for the Authority, are only concerned with transmission and competition in generation and supply. They make no reference to distribution. It should also be noted that the standard electricity licenses oblige the licensee to be a Party to the BSC, currently the only recognised settlement code in England and Wales.

Nevertheless, it can be argued that P62 promotes effective competition in supply (Applicable BSC Objective (c)), by facilitating competition on these new networks, in a manner consistent with the BSC's treatment of existing networks, and in a manner consistent with the intent of the Utilities Act 2000 and the standard licenses.

Without the BSC changes proposed by P62, alternative trading arrangements may be required to allow competitive supply on these new Distribution Systems. This duplication would be inefficient by creating parallel sets of Settlement rules for Suppliers to observe. The argument is that this is would not be efficient, would not promote effective competition in supply and would need supporting license changes.

⁹ This explanation is based on Post Note 163 (Parliamentary Office of Science and Technology) which is about UK Electricity Networks and in particular the contribution of renewable electricity and Combined Heat and Power (CHP) to UK energy supplies.

¹⁰ The relevant BSC Objectives are contained in Condition C3.3 of NGC's Transmission Licence and are:

- (a) the efficient discharge by the licensee of the obligations imposed upon it by this licence;
- (b) the efficient, economic and co-ordinated operation by the licensee of the licensee's transmission system;
- (c) promoting effective competition in the generation and supply of electricity, and (so far as consistent therewith) promoting such competition in the sale and purchase of electricity;
- (d) promoting efficiency in the implementation and administration of the balancing and settlement arrangements.

¹¹ Section 13 of the Utility Act 2000 provides a replacement for section 3 of the Electricity Act 1989: 3A - (1) The principal objective of the Secretary of State and the Gas and Electricity Markets Authority (in this Act referred to as "the Authority") in carrying out their respective functions under this Part is to protect the interests of consumers in relation to electricity conveyed by distribution systems, wherever appropriate by promoting effective competition between persons engaged in, or in commercial activities connected with, the generation, transmission, distribution or supply of electricity.

Based on this, the VAMG consideration of P62 is whether P62 provides the optimal, and cost-effective solution to the problem of allowing new licensed distributors to operate within the rules of the BSC and its Settlement systems. The Panel further defined this in the Terms of Reference as the least cost solution in implementing Option 7 with a view to the cost to the industry as a whole.

6.2 VAMG Assessment of P62

The VAMG agreed that the summary in section 6.1 was an accurate representation of the background to P62 and its relationship to the Applicable BSC Objectives. In particular the VAMG noted:

- the relevant sections of the Utilities Act 2000 were already in force and that some changes within the industry were required to accommodate new licensed distributors;
- providing a solution outside the BSC would result in parallel trading arrangements and would be both inefficient and not cost effective;
- the optimal approach for the industry as a whole was a cost effective solution within the BSC.

In light of these factors the VAMG believed that Modification Proposal P62 satisfied the last point and also represented the optimal approach for satisfying the requirement to facilitate competitive supply on the networks of new licensed distributors.

The VAMG therefore believed that P62 promotes effective competition in supply (Applicable BSC Objective (c)), by facilitating competition on these new networks, in a manner consistent with the BSC's treatment of existing networks, and in a manner consistent with the intent of the Utilities Act 2000 and the standard licenses.

Furthermore the VAMG recognised the linkage with P70 expressed by a number of Parties within their consultation responses, in particular those who:

- made their support for P62 conditional on the approval of P70;
- believed that P70 was an integral part of an overall P62 solution;

The VAMG also agreed that a combination of P62 and P70 would provide a better technical solution.

6.3 P62 Key Issues

In addition to their recommendation the VAMG believed it was appropriate to highlight the following key issues:

- **MRA changes** – the MRA changes are progressing in parallel to P62 and will not be complete until after the Modification Report is sent to the Authority;
- **interim arrangements** – as stated in section 5.1 the relevant sections of the Utilities Act 2000 are already in force and hence there may be a need for interim arrangements should a new licensed distributor wish to operate, or an existing PDSO wish to operate outside of its Distribution Services Area, prior to P62 being implemented. The DBFG are discussing this issue;

- **trading of partial networks** – the solution proposed within P62 meets the key requirement to facilitate competitive supply on the networks of new licensed distributors, however, it does not address the issue of commercial trading of partial networks. This was an acknowledged issue with existing networks prior to P62. Although there is a solution to trading partial networks, and P62 does not make the issue any worse, the VAMG recognise that the introduction of new licensed distributors may increase the pressure to find a general solution to trading partial networks for both the new and existing networks;
- **clarity of estimates** – P62 is a subset of a larger initiative to make the necessary changes to recognise new licensed distributors and a lot of the costs are outside the BSC. The estimates provided by Parties and Party Agents reflected that the requirements were still very high level and that there were a lot of wider issues still to be resolved;
- **P62 cost / benefit** – the VAMG noted that changes would be required outside of the BSC even if P62 was not implemented and similar costs would be incurred. A number of Parties during the consultation, found it difficult to link P62 to the Applicable BSC Objectives as they could only assess the costs of implementation and had to accept the benefits as a given. It was not possible to predict what the level of demand would be for the new services offered by P62, or the precise nature of any network and how it would be configured within the BSC Systems. These all combined to make it hard to judge whether the proposed solution was cost effective;
- **increased complexity** – the one-to-one link between a distributor/SMRS and a GSP Group is a fundamental feature of the SVA arrangements, breaking this link will increase the complexity of the Trading Arrangements and possible performance of the BSC systems. Depending on the degree of uptake in the use of these new facilities, it may be necessary to plan further work to react to any performance degradation in systems, processes or data quality;
- **interaction with other scheduled changes** - in addition to the P62 changes to SVAA, it is necessary to upgrade the versions of both Oracle and UNIX on the underlying server. These are scheduled for upgrade during 2003 as the software will become unsupported. If the Authority determine that P62 should be made after 01 September 2002, then this may involve implementation after the Oracle and UNIX upgrade, i.e. implementation in Summer 2004.

7 IMPACT ON BSC AND BSCCO DOCUMENTATION

7.1 BSC

The following section provides a summary of the BSC changes required for P62. It is split into two sections: changes to the definitions in the Section X-1 (General Glossary); and changes in the obligations defined in the rest of the BSC.

The full set of changes are contained in Annex A. It should be noted that these are draft changes and are still being reviewed. The final version will be included in the Modification Report.

7.1.1 Defined Terms

The current definition of the "Total System" is:

the Transmission System and each Distribution System.

In order to allow this definition to remain unchanged, some of the existing terms are redefined and new ones introduced:

- a new term "Licensed Distribution System Operator" (LDSO) is introduced to refer to any Party which holds a Distribution License. This new term will be used to replace all references to PDSO;
- the definition of a Distribution System is extended to include any distribution network operated by an LDSO. It is also amended to reflect that a single distribution system¹² operated by a LDSO may form multiple Distribution Systems, each within a different GSP Group;
- the GSP Group definition is amended to reflect the fact that a GSP Group may consist of multiple complete Distribution Systems. With the introduction of P62 the VAMG believe that more than one of these networks within a GSP Group may need a direct connection to the Transmission System, and that it is no longer appropriate to have a definition which automatically defines a GSP Group. GSP Groups are in reality a set of Grid Supply Points (GSP) that meet certain criteria, such as being geographically close, and that in future new GSP Groups should be determined by the Panel based on these criteria and using the existing 12 GSP Groups as the starting point;
- the definition of an SMRS is changed to state it is operated by an LDSO and that a single SMRS is responsible for recording the entry/exit points for all the Distribution System(s) operated by the LDSO and any Associated Distribution Systems(s) for which the LDSO is responsible.

7.1.2 Obligation Changes

In addition to the changes in the underlying defined terms the following changes are made to the obligations within the main body of the BSC:

- a number of changes are required to recognise that an SMRS is no longer associated with a single GSP Group and that it may be responsible for the recording of entry/exit points for a number of Distribution Systems and potentially Associated Distribution Systems;
- the majority of obligations previously restricted to a PDSO are now extended to include LDSO, including:
 - ensuring the necessary rights for de-energising plant or apparatus (Section H);
 - co-ordination of breaking metering seals (Section L);
 - providing an SMRS that has satisfied an Entry Process in accordance with BSCP511 and providing assistance to any Supplier in accordance with BSCP512 (Section J);

¹² As defined by Section 4.4 of the Electricity Act, following amendment by section 28 of the Utilities Act 2000.

- establishing LLFC and LLF in accordance with BSCP28 (CVA metering systems) and BSCP528 (SVA metering systems). Each distributor will have only one set of LLFC and these will not be required to be restricted geographically (Section K & S);
- those related to Unmetered Supply, such as maintaining an inventory and issuing Unmetered Supply Certificates (Section S);
- extending the rule on who can submit aggregation rules for a GSP Group, to cater for circumstances where a GSP Group is not associated with a PDSO. Although the creation of new GSP Groups is outside the scope of P62 this change makes the obligation consistent with the definition of a GSP Group (Section R);
- maintaining SVA Metering System Numbers related to their Distribution Systems (Section X);

7.2 Code Subsidiary Documents

The introduction of P62 will affect a significant number of BSCPs and Service Lines, even if this is just to change references from PDSO to LDSO, or change any references to a Distribution Services Area into an appropriate reference to a set of Distribution Systems.

In addition updates have been identified to the following:

- BSCP507 - outlines the process whereby the Supplier notifies the DA / DC combination at the GSP Group to SVAA. Changes may be required as there will be potentially more complex relationships, with multiple distributors operating within each GSP Group;
- BSCP509 – the introduction of P62 means that there will be a need to update MDD to indicate that a new licensed distributor, and hence SMRS, is operating within the BSC Systems, and also that an existing distributor may be operating in a new GSP Group. In order to ensure that this occurs in a co-ordinated manner it may be appropriate to amend this BSCP to place additional checks on the changes to the necessary MDD data.
- BSCP511 – Annex C.6 details significant changes to this BSCP to incorporate new Entry Processes and the different categories of SMRS possible under P62;
- BSCP512 – Annex C.6 details significant changes to this BSCP to incorporate new Entry Processes and the impact on each agent type of operating in a GSP Group with multiple distributors and SMRS;
- BSCP520 – P62 allows new licensed distributors to operate Unmetered Supply on their networks. It was considered that BSCP520 would benefit from being updated to make it clearer what the obligations are.
- New Service Line – in addition to updating BSCP520 it was considered that Unmetered Supply would benefit from having their own Service Line.

In addition to the identified changes, additional changes may be required to existing BSCPs to clarify areas of P62 that are identified during development and implementation as being unclear. It has also been suggested that a new BSCP may be appropriate, to document the obligations on a distributor and to represent their side of all the data flows.

All changes to the BSCPs will be developed after approval of the Modification as part of the implementation project.

The other identified changes to Code Subsidiary documents are to the Service Descriptions and other design documents, which will need to be updated to reflect the changes in section 8.

8 IMPACT ON BSC SYSTEMS

The following section contains a summary of the changes to the BSC Systems and is based on information in Annex C. For further details on the overall impact, see section 15 where the high level implementation plan is discussed.

8.1 Central Volume Allocation Systems

P62 is primarily a change to SVA and has been designed to avoid impacts on CVA.

A detailed level impact assessment was requested on the expected impact and this only identified documentation changes.

The quote for this was estimated at £22,600, further details can be found in Annex C.5.

8.2 Supplier Volume Allocation Agent (Development)

The changes required to SVAA to facilitate this modification affect some of the underlying assumptions and will require significant testing. The areas of SVAA impacted by this modification are:

- Database structure to support multiple distributors within a GSP group
- Maintenance and view screens
- Supplier Purchase Matrix load mechanism (D0041)
- SSR process to handle multiple distributors within a GSP group
- Settlement Run Equitability Report
- DUoS report
- Archiving
- Market Domain Data (MDD)
- Performance of system

A broad range of functional areas is impacted and consequently comprehensive testing will be required.

Unlike an impact assessment for changes to the CVA systems, this assessment only includes development and unit testing. Further work and costs are required to complete testing and implement the service.

The estimated timescales for this work include a 4 week notice period and 14 weeks of development and testing.

The quote for this was estimated at £86,012, further details are given in Annex C.1;

8.3 Supplier Volume Allocation Agent (Operation)

This assessment includes the effort to host the SVAA service and also development of changes to MDD Application and the PARMS information flow.

Activity	Costs
MDD Application Development	15,000
Logging and Pool Apps / PARMS feed	20,000
SVAA Operational Procedures	500
Associated Software development and testing (Total)	35,500
SVAA Software Acceptance and integration testing	20,000
Total	55,500

The estimated timescales for this work are 14 weeks for the development activities and 8 weeks for the testing.

The quote for this was estimated at £55,500 further details are given in Annex C.4.

8.4 ELEXON Maintained Agent Software

A number of the Supplier Agents utilise two software components maintained by ELEXON:

- NHHDA Software, a detailed level impact assessment has estimated changes at £27,914, further details are in Annex C.2;
- EAC/AA Software - impact assessment has confirmed there are no changes to this software.

The NHHDA software is developed and supported on a Compaq Unix platform. However a number of participants have ported versions of these systems to both Sun and HP platforms. These ported versions are not supplied or supported by ELEXON. Generally participants have entered into a direct contract with Logica to undertake the port on their behalf and to provide support. These specific commercial contract arrangements are not known to ELEXON and consequently costs and timescales associated with this activity cannot be included in this assessment. However the porting of the software and subsequent testing cannot be undertaken until the Compaq version has been released by ELEXON following testing and acceptance.

In order to satisfactorily test NHHDA, participant testing will be required. This should ideally involve 2 participants testing the software on full width test data. Volunteers will be required to undertake this testing.

8.5 Entry Processes

Although not a BSC System this is an important aspect of P62 (see Section 10 of [RD/2]) and the implication on Entry Processes are described in Annex C.6. The following table details the estimated costs for preparing and running Entry Processes. It is important to note that the 1st year execution costs are based on an estimated level of required testing, in addition these costs are paid by the participant involved and do not feed into the implementation plan described in section 15.

Activity	Costs
EP Changes to BSCP511 and BSCP512	10,000
EP Scripts for SMRS/LDSO tests	50,000
1st year executions	60,000
Total	120,000

9 IMPACT ON CORE INDUSTRY DOCUMENTS AND SUPPORTING ARRANGEMENTS

9.1 Master Registration Agreement (MRA)

As stated in section 13 of [RD/2] a number of changes are required to the MRA as a result of the Utilities Act 2000, in addition some of these are needed specifically to support P62. The nature of these changes means it is not possible to progress these changes under the Joint Change Process and they will need to be progressed independently of P62.

The following impact assessment was received from MRASCo in relation to P62:

As the DBFG is a MEC Focus Group, in parallel with the progression of P62 an independent set of MRA Change Proposals are being developed in line with "Option 7" as the framework for the baseline design, as endorsed by the MRA Executive Committee (MEC) at their meeting on 29 January 2002 [RD/3]. The Distribution Business Focus Group will be presented with outline draft proposals at the June meeting. Change Proposals for processing through the MRA Change Process will be developed and progressed from there. In addition, SAS changes are being progressed in parallel in support of "Option 7".

9.2 Data Transfer Services Agreement (DTSA)

The requirement to establish and maintain a Data Transfer Service is a Section C obligation within the standard distribution license. This means it may not be in force for any new licensed distributors. The P62 Requirement Specification [RD/2] noted that ElectraLink had indicated that new licensed distributors could use the service as users.

ElectraLink were asked to provide an impact assessment and made the following observations. Their analysis is limited to impact on the Data Transfer Service Agreement and the service itself, and not to the subject of license obligations to provide a Data Transfer Service. As [RD/2] states, it is unlikely that this condition would be applied. Even if it were, ElectraLink believe the likelihood is that the non-ex PES distributors would outsource this obligation to ElectraLink (for commercial reasons if nothing else).

ElectraLink has already updated the Data Transfer Service Agreement (DTSA) with changes to support the Utilities Act 2000. The changes that were implemented at that time should be sufficient to manage these new, potential license holders. For example, a Distribution Business is now defined as having the meaning given to that term in the Electricity Distribution License. There are a small number of similar references in the DTSA.

Technically, the Data Transfer Service (DTS) will not be adversely impacted by the change as long as each distributor is allocated its own Market Participant Identifier within MDD. This will allow the DTS to route specific data to and from these new entities, if required. From the text of the proposal, this is implied.

Even if a new distributor outsources its SMRS obligations to an ex-PES, the DTS can route data for multiple Market Participants to the same (or different) connection point.

The increase in volume associated with the Line Loss Factor files will require careful monitoring to ensure that very large data files are not sent to DTS users who only have low volume connections to the DTS. The LLF files are typically the largest files that are

currently transmitted across the DTS. Any resultant growth in these files should be flagged to ElectraLink as early as possible. Typically LLF files are only transmitted across the DTS during a few months near the start of the year, peaking in Feb/March, so the impact can be managed efficiently and predictably.

The DTS is scalable and can grow to accommodate new Users and additional data volume, however commercially it may be more beneficial for new distributors to operate off the back of an existing DTS connection point (Gateway). This is particularly true because annual volumes on the DTS to and from distributors is not very large. This may also be convenient if, for example, the new distributors outsources its SMRS obligations to an ex-PES.

Their response also stated they had no view on the suitability of the proposed arrangements and also reserved the right to provide further information relating to this proposal, especially if the assumptions made regarding license obligations turns out to be incorrect.

9.3 Settlement Agreement for Scotland (SAS)

Strictly speaking, Modification Proposal P62 relates purely to the BSC, and has no impact on the Settlement Agreement for Scotland (SAS). However, it should be noted that the SAS includes Trading Arrangements very similar to those in Section S of the BSC. SESL and the Scottish Modification Panel are therefore progressing a similar change, MOD50/02, in the Scottish Market. This change is under the Scottish change control procedures, outside the scope of the BSC.

9.4 Distribution Documents

The core industry documents related to distributors are as follows:

- **Distribution Codes** – an impact assessment by Mike Kay and Roy Barnes on behalf of the Distribution Code Review Panel has indicated no anticipated changes as a result of P62.
- **Distribution Use of System Agreements (DUoSA) & Distribution Connection Agreements** – These are individual agreements and the types of changes are being examined by the Distribution Commercial Group (DCG) within DBFG.

10 IMPACT ON ELEXON

The main impact on ELEXON will be the management of the implementation project required to make the required changes to the BSC Systems. This is described in more detail in section 15.

Once operational the impact on ELEXON will be due to the need to manage a greater number of distributors and Supplier Hub combinations. This will affect the level of entry processing (new and modified SMRS and subsequently Suppliers) and also the level of exceptions due to discrepancies within the SVAA standing data. Until there is a degree of familiarity, and also a critical mass of tested agents, this will impose an additional burden to ensure the processes operate correctly.

An assessment of the Performance Assurance Framework (PAF) has not identified any immediate changes that need to be made. However, the impact of P62 may need to be reviewed in the second phase of the PAF Review.

11 IMPACT ON PARTIES AND PARTY AGENTS

P62 is part of a larger initiative to make all the necessary changes as a result of the relevant parts of the Utilities Act 2000. As such the impact on Parties and Party Agents due specifically to P62 is a subset of the overall cost.

The Panel recognised this in their initial consideration of P62 by including in the Terms of Reference a request to investigate the overall cost to industry.

The VAMG have found this particularly difficult:

- this is not a single centrally managed programme, although the changes to the central BSC Systems are now fairly clear, other aspects of the overall solution are still being developed outside the BSC by the DBFG and the individual distributors and Suppliers. This is not unexpected as they are facing different issues, with different timescales and milestones, however, it does mean it is not possible to establish the full impact of the initiative at this stage.
- it is not clear what take up of the new facilities offered by P62 will be, and hence the level of real change, and over what time period. At one extreme an existing PDSO may decide not to operate out of area, and if no other distributor decides to operate within their authorised area, then they could be unaffected. At the other extreme an existing PDSO may decide to operate out of area, and also offer a commercial SMRS service for multiple GSP groups. This may attract a number of new licensed distributors and hence the PDSO would face additional work. A similar argument can be applied to data aggregators / collectors and the level of change here will effect the knock on impact to Suppliers;
- an interesting parallel was drawn to the Y2K problem, although there are a lot of areas that may be unaffected by breaking the one-to-one link between SMRS/distributor and GSP Group, it will be a large undertaking to investigate / prove each;

These problems were reflected within the Impact Assessment received. Only a minority of Parties were able to give even rough estimates of their expected impact, many responses indicated it was simply too early to assess. This was also reflected in the range of costs for distributors and Suppliers, which indicated a range £30K to £1M, with a number of responses grouped around £200K.

The VAMG were not surprised by these estimates and do not believe it will become clearer until Parties start to plan the detailed changes. However, it is important to make clear that approval of Modification Proposal P62 is on the critical path for the overall solution as it is seen as setting the proposed Implementation Date and also providing the green light to start planning for the changes.

It should also be noted that changes arising from P62 could in time affect the majority of systems used within Settlement. Section 10 of [RD/2] describes the impact on Entry Processes and the changes necessary to test the new P62 functionality. This means that where Suppliers intend to register customers associated with a new licensed distributor,

they will need to test a new Supplier Hub(s) for that distributor's SMRS, in accordance with BSCP512. In the case where the distributor is an existing PDSO operating out of area, they may also be required to re-test some of their existing Supplier Hubs. Sections 8.5 and C.6 give some impression of the 1st year costs of this, however, this activity is very much demand led and is currently based on an assumption of 3 new SMRS and 6 impacted Suppliers.

12 LEGAL ISSUES

P62 is about making the BSC consistent with changes to the statutory and regulatory framework. Therefore P62, or another modification with a similar intent, is required to address any resulting legal issues.

The VAMG believe that P62 addresses such issues, however, attention should be drawn to the assumptions in section 5.3, in particular those that relate to the distribution licence.

13 SUMMARY OF REPRESENTATIONS

13.1 Consultation Responses

A consultation on P62 was held between 25 April 2002 and 16 May 2002. In total 17 Responses were received representing 63 Parties. Of these 2 responses were from non-Parties.

The following is a list of the questions asked in the consultation and reported in table 13.1:

1. Based on the information contained in the Requirements Specification, do you believe that there are any elements of the Modification Proposal that are prohibitive or infeasible? If your answer is yes, please provide some explanation.
2. If your answer above is no, do you believe that the balance of overall cost and overall benefit of the Modification Proposal is such that Applicable BSC Objectives are better achieved? Please provide reasoning and quantification (where possible) for your conclusion.
3. Do you believe that there are other approaches to modifying the BSC that could accommodate the provisions of the Act that would better achieve Applicable BSC Objectives to a greater extent than the Modification Proposal? If your answer is yes, please describe the approach and quantify, to the extent possible, how the cost/benefit is improved.
4. The VAMG recognised there was a potential problem that if a new Distribution System did attempt to directly connect to the Transmission System then the existing BSC definitions would force the creation of a new GSP Group. The VAMG believe this is against the spirit of Option 7 "one distribution business equals one SMRS , without the creation of new GSP Groups". The VAMG believe that to avoid consideration of the implications of creating a new GSP Group, it would be advisable to extend the definition of a GSP Group to allow more than one Distribution System to directly connect to the Transmission System within each GSP Group.

Do you agree the VAMG proposal to modify the BSC GSP Group definition is pragmatic and by avoiding the unnecessary creation of additional GSP Groups would better achieve the Applicable BSC Objectives

Table 13.1 - P62 Consultation Responses

Party Name	Parties	Q1	Q2	Q3	Q4
TXU	21	No	Yes	No	Yes
McNicholas Construction Services Limited	0	Yes	No Comment	No	Yes
SEEBBOARD Energy Limited	1	Yes	No*	Yes	Yes
Scottish and Southern Energy	4	No	Yes	No	Yes
British Energy	3	Yes*	No*	Yes*	No*
Western Power Distribution	2	No	Not Sure	No	Possibly
SEEBBOARD Power Networks	1	No	Yes	Yes	Yes
Innogy	9	Yes	No*	Yes	Yes*
Scottish Power	6	No	Yes	No	Yes
Powergen	4	No	Yes	No	Yes
IM Serv	0	No	Yes	No	Yes
NEDL/YEDL	2	No	Yes	No	Yes
BGT	1	No	Undecided	No	Yes
Aquila	1	No	No	Yes*	Yes
EME #	1	No	Yes	Yes	Yes
ABB Treasury & Energy Services #	1	No	Yes	No	Yes
LE Group #	6	No	Yes	No	Yes

Majority Response	No	Yes	No	Yes
Respondents in agreement	76%	59%	65%	88%
Parties in agreement	79%	73%	75%	92%

Note: cells marked "*" have been implied from the associated rationale responses marked "#" were received after the initial deadline

Analysis of the responses established the majority response and % agreement with that view. In addition this analysis established three main issues:

- two respondents believed that the costs associated with this modification were prohibitively high and were not justified in terms of a cost/benefit analysis;
- one respondent proposed an alternative solution that used the first two digits of the MPAN to identify the network, rather than the distributor. This was claimed to provide a better indication of the physical location of the network and also enable trading of partial networks;
- three respondents made their support for P62 conditional on P70 also being approved. In addition three other respondents expressed strong support for P70, against one respondent who was opposed to P70. If this conditional support for P70 was included in the table 13.1, then the 59% of respondents shown as believing P62 would better facilitate the Applicable BSC Objectives (Q2) would become either 65% or 47%, depending on whether P70 was approved, or not.

13.2 VAMG Consideration

At the Modification Group meeting on 21 May 2002 the VAMG considered the issues raised in the consultation responses, in particular the three main issues described above.

13.2.1 Cost / Benefit of P62

The VAMG had sympathy with the respondents who believed there was not sufficient benefit to justify the high costs associated with P62. However, the VAMG also recognised

that making changes within the industry to incorporate the Utilities Act 2000 was not optional, and that costs would exist irrespective of P62.

The VAMG also recognised that it was not possible to quantify the benefits associated with new licensed distributors and hence it was only possible to seek the least cost solution which was considered sufficient to meet the requirements.

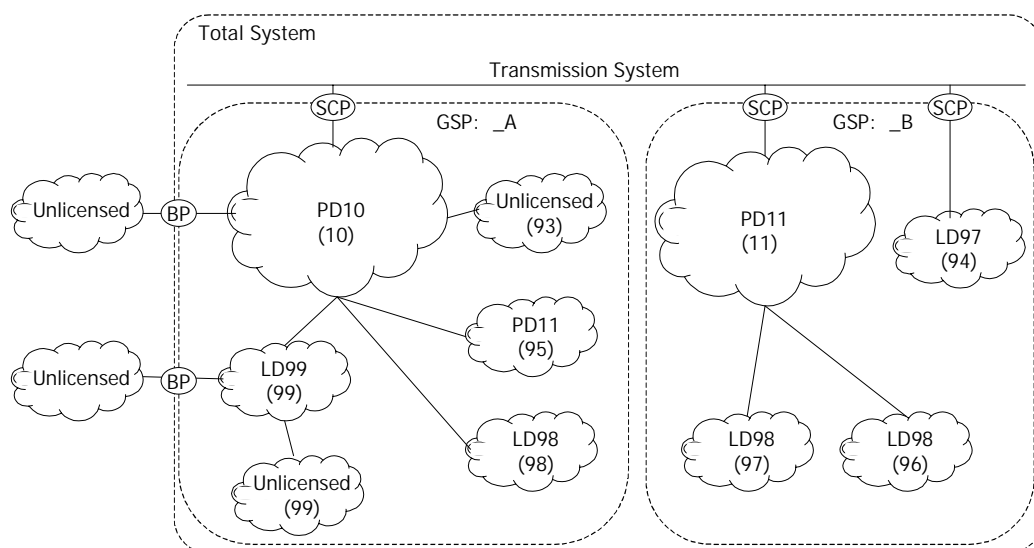
13.2.2 Alternative Solution

The VAMG also considered in detail an alternative solution proposed by Innogy in their response. Although only recently introduced the solution is not entirely new as the original DBFG considerations had considered similar approaches:

- Option 4 – Operate SMRS for each individual network;
- Option 10 – Each distribution licensee procures or operates one or many SMRS.

Figure 13.1 was used by the VAMG to compare the new alternative solution against Option 7, using the example originally introduced in figure 4.2

Figure 13.1 – Alternative Solution



Under Option 7 the first two digits of any MPAN will correspond to the distributor, and hence with our example names could be one of five different values. For the purposes of our example it is assumed that under Option 7 PD10 would use the two digits "10". However under the alternative solution each individually identifiable network (i.e. tradable) would have its own two digit identity, as shown using the two digits in brackets. This would require more values than could be represented by two numeric digits and hence the proposal would be to expand the definition of an MPAN to allow it to start with alphanumeric values. In addition a lookup mechanism would be required within MDD. Table

13.2 shows how this new number could be used to establish the distributor, the GSP Group (or geographical area) and the SMRS¹³.

Table 13-2 Alternative Solution MDD Data

Network	GSP Group	Distributor	SMRS
10	_A	PD10	PD10
11	_B	PD11	PD11
93	_A	PD10	PD10
94	_B	LD97	PD11
95	_A	PD11	PD11
96	_B	LD98	LD98
97	_B	LD98	LD98
98	_A	LD98	LD98
99	_A	LD99	LD99

The VAMG recognised that proposing an alternative solution at this stage presented significant problems. P62 originated out of work initially started by DBFG and being progressed in parallel outside the governance of the BSC. Therefore any decision to change the underlying architecture would need to seek the agreement of the DBFG. This had been recognised by the Panel in setting the Terms of Reference for the VAMG to further assess the solution referred to as Option 7.

The VAMG considered the technical aspects of the solution and whilst they recognised that it did improve the ability to trade partial assets of some networks, and that it would be easier to establish the geographical location of the network, they also recognised a number of other major issues:

- P62 is about introducing the changes necessary to facilitate competitive supply on the networks of new licensed distributors, the text of the Modification Proposal did not extend to improved trading of network assets;
- the claim that the alternative solution improves the ability to trade partial distribution networks is limited to any new networks introduced after P62 is introduced, and does not include any existing networks, which would still represent the majority of assets;
- the trading of partial distribution networks was a recognised issue prior to P62. It is recognised that the current mechanism is complex in that it involves a logical disconnection, followed by a reconnection involving a new MPAN, however this problem is made no worse with the introduction of P62;
- any solution for trading of partial networks should not be discriminatory and apply equally to existing distribution networks and post P62 distribution networks.

The VAMG also recognised that the Utilities Act 2000 was already in force and that any attempt to alter the proposed solution at this late stage in the modification process would introduce further delay in making the BSC consistent with the requirements of the Utilities Act. The VAMG considered this to be a major factor in its decision not to further consider the alternative solution.

¹³ The SMRS is stored separately to give flexibility to distributors who do not wish to use the same SMRS for each network (i.e. as shown for network 94 where distributor LD97 uses the SMRS of PD11).

13.2.3 Linkage To P70

The last consultation issue to be considered by the VAMG was that of the linkage between P62 and P70, in particular the VAMG noted:

- the strength of feeling being expressed in the consultation responses regarding P70, especially by those that linked their support for P62 to that of P70;
- from a process perspective any recommendation regarding P62 would need to be independent of P70;
- the argument that although P62 may better facilitate the applicable BSC Objectives, they were best facilitated by a combination of P62 and P70.

The VAMG also recognised that a response from a potential new distributor suggested that the presence of such a meter would be a barrier to competition. The VAMG believed this particular response was misleading in that industrial and commercial networks with HH metering was not the main issue, in many cases these networks may continue to be unlicensed. The main area where a meter may be of use would be large domestic NHH networks, where the calculated energy leaving the network would be based on predominantly profiled data. In addition VAMG noted that P70 is not about the presence of such a meter, that should be covered by Distribution Connection Agreements. P70 is only about whether it should be possible for CDCA to collect the data, on those networks where such a meter did exist.

As a result of the strong representation within the consultation responses, the unanimous view of the VAMG was that the recommendation for P62 should make it clear that the group also believed that the solution proposed by P62 would benefit from the approval of P70, and that together they would even better facilitate the Applicable BSC Objectives.

13.3 Technical Questions Included in Responses

A number of consultation responses or impact assessments also contained questions related to P62. These were considered by the VAMG during their assessment:

- the legal text in S8.2.13 still makes reference to PDSO (P62_ASS_003). The VAMG believed this was a historic reference to obligations at the time of Go-Live and effectively remain with the PDSO. However, as the term PDSO will be removed as a defined term within the BDC, the legal text has been changed to reflect this;
- the legal text in K1.7 seems to remove an obligation for a LDSO to be responsible of for settings LLFs at all exit points on its network (P62_ASS_006) - the intention of the change was only to alter the reference from GSP Group to the relevant Distribution Systems. The legal text has been changed to remove the additional reference to Boundary Points;
- the need for a HHDC to determine the GSP Group differs in Scotland (P62_ASS_009). The VAMG were informed that this was due to different data estimation rules under the SAS and the SESL representative believed the best approach would be to bring the SAS in line with the BSC;
- the provision of the radio tele-switch service (RTS) service for new networks (P62_ASS_009) (P62_IA_004). The VAMG believed that RTS was not directly linked to P62, as any agent could provide a national service and it was not linked to a PDSO

operating within its Distribution Services Area. In addition the MRASCo representative stated this was being addressed by DBFG;

- P62 has the potential to introduce ambiguity in the submission of Aggregation Rules. The VAMG recognised this as an accepted risk as it was inherent in allowing multiple distributors to operate within the same GSP Group. However the VAMG thought the existing controls were sufficient to cope with what is a slow rate of change in GSP Group Take Aggregation Rules;
- under P62 it is possible for a licensed distributor to continue to have their network “adopted” by another PDSO (P62_IA_004). The VAMG believed that any licensed distributor would be required to operate their networks in accordance with P62 and that only unlicensed distributors could continue to have their networks “adopted”. In addition in the interim if any licensed distributor had their networks “adopted” then they would need to be transferred after the introduction of P62 (See Section 5.1);
- will licensed distributors have own Meter Timeswitch Codes (MTC) (P62_IA_004). This was related to consideration of RTS, however, on this specific point each distributor will have their own codes (see Section 8.5 of [RD/2]);
- one assessment made the point that in figure 6.1 it did not indicate that a HHDC also produces a D0275 (Validated Half Hourly Advances), as well as D0036 (Validated Half Hourly Advances for Inclusion in Aggregated Supplier Matrix) (P62_IA_004). The D0036 had been included in the figure to highlight that it was sent to the distributor as well as HHDA. The text in this document (Section 4.7) now includes a reference to the D0275 flow;
- one assessment made the point that the Supplier does not send D0152 (Metering System EAC/AA Historical Data) to NHHDC (P62_IA_006). This had been included in the requirements specification as the SVA Data Catalogue indicated this flow can exist and this is further explained in BSCP504. However, it should be noted the MRA DTC does not include the reference.

14 SUMMARY OF TRANSMISSION COMPANY ANALYSIS

The NGC Impact Assessment has indicated this modification has no impact on the Transmission Company

Table 14.1 - NGC Impact Assessment

Question	Response
Q1 - Please indicate the costs associated with the BSC changes proposed by this Modification Proposal. These should be limited to those changes described in the Requirements Specification	<i>There should be no costs for National Grid associated with implementation of this Modification Proposal.</i>
Q2 - Please indicate any others factors related to the overall cost of changing your systems to accommodate new licensed distributors, which you feel are related to this modification and provide an appropriate context for any decisions made regarding P62.	<i>Not applicable.</i>
Q3 - How much notification would you require to implement P62?	<i>5 working days.</i>
Q4 - Does the Modification give rise to any implementation issues within your organisation? (if so please give details)	<i>No implementation issues.</i>
Q5 - Do you have any further views.	

15 PROJECT BRIEF

The following section provides an overview of the implementation project and the estimated costs and timescales. It should be noted that these would be unaffected if P70 was implemented at the same time.

The following tables have been produced to show the overall BSC implementation costs. The duration field has only been completed for those tasks expected to be on the critical path. In addition the SVAA and NHHDA impact assessments described in Section 8 do not include the full range of testing. This additional testing is initiated by ELEXON using the SVAA developer, agent and other third parties, estimates for the different phases have been included in the following tables.

Table 15.1 – SVAA Development & Implementation Costs

Activity	Section Ref	Cost (£)	Duration (Weeks)
Notice	8.2		4
Associated software development and testing	8.3	35,500	14
Test and data preparation		23,496	
SVAA software development and testing	8.2	86,012	14
Testing environment		31,500	
ELEXON acceptance testing		78,125	8
System integration testing (SIT)		18,750	3
Pre-production testing (PPT) (inc end to end testing)		20,000	4
Parallel running		15,000	2
SVAA Agent software acceptance testing (SAT)	8.3	20,000	8
Cut-over to live		13,000	1
SVAA Extended support		22,500	
Total		363,883	

Table 15.2 – NHHDA Development & Implementation Costs

Activity	Section Ref	Cost (£)	Duration (Weeks)
NHHDA software development and testing	8.4	27,914	6
Testing environment		21,000	
ELEXON acceptance testing		62,500	6
Participant and pre-production testing (PPT)		10,000	2
NHHDA additional software support		11,250	
Total		132,664	

Table 15.3 – Additional Costs

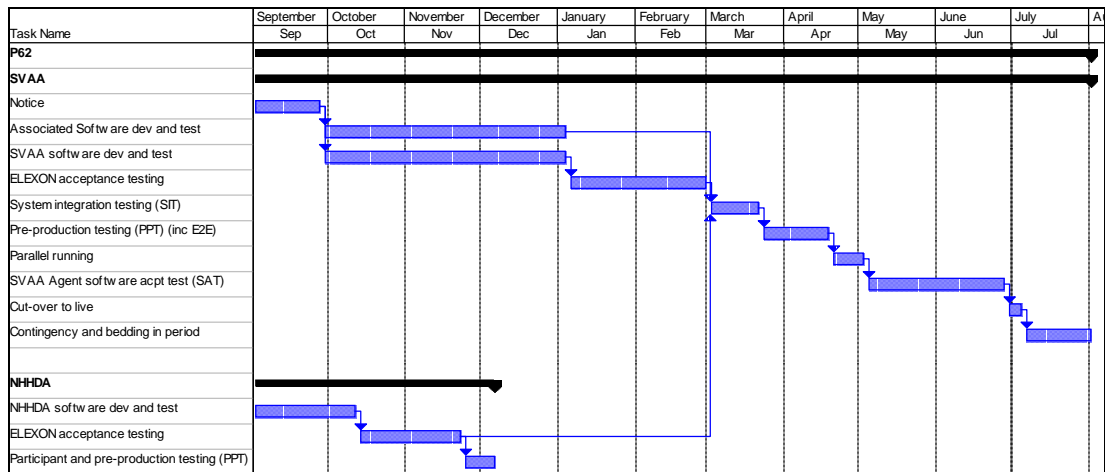
Activity	Section Ref	Cost (£)	Duration (Weeks)
CVA Documentation	8.1	22,600	
EP Changes to BSCP511 and BSCP512	8.5	10,000	
EP Scripts for SMRS/LDSO tests	8.5	50,000	
Total		82,600	

The sum of all three table produces an overall estimate of £580,000.

In addition to these figures the ELEXON estimate for its internal effort to progress this modification is 92 man weeks. This will cover management of the implementation and changes to BSCPs, design documents and business processes.

Figure 15.1 shows a draft project plan for the implementation using the duration values in the previous tables. This assumes the modification is approved by the Authority on 01 September 2002 and on that basis would lead to a proposed Implementation Date of 01 August 2003.

Figure 15.1 Draft P62 Implementation Plan



In addition to these figures the following dependencies have been identified:

- completion of both the NHHDA and MDD changes are required before integration testing can be undertaken;
- resources for testing, both internal and external to ELEXON;
- availability of participant testing sites;
- planned date for maintenance release of SVAA;
- planned dates for Unix and Oracle upgrades for SVAA;
- resolution of LLFC closure performance issue.

The following areas have been identified where additional costs may be incurred:

- performance;
- disk capacity;
- scope of Integration testing.

The impact assessments have indicated that further specific information is required before these areas can be resolved. For example the SVAA agent will require additional capacity but this cannot yet be estimated until the technical solution has been completed.

A number of issues have been identified which will impact either the delivery time frame or costs.

- the Logica assessment assumes that enhanced test scripts and data for SVAA will be available for full regression. These are unlikely to be available before the P62 changes are made and hence further costs will be incurred to prepare the tests and data. The costs will be impacted although the scripts and data should be able to be prepared in parallel with the development;
- in order to undertake performance tests an additional allowance is required. The current work on defining acceptable performance criteria and times will be required to be completed for the P62 changes;
- the scheduling of the P62 changes will need to be co-ordinated with other planned releases of SVAA. Currently both Unix and Oracle upgrade releases are planned. The implementation date for the P62 changes will impact these planned releases. The support periods for the current versions of Unix and Oracle will be drawing to an end in 2003. Consequently the software development phase for P62 will need to be undertaken before the end of 2002 in order not to impact these support periods. A possible release schedule for the SVAA system is outlined below:

Maintenance release	Jul 2002 - Sep 2002
P62 changes	Sep 2002 - Jul 2003
Unix v5.1 upgrade	Dec 2002 - Aug 2003
Oracle 9 upgrade	Mar 2003 - Oct 2003

- the assessments assume the delivery of the changes independently although the impact assessments have indicated that there is the capability to deliver the changed systems in parallel;
- the SVAA Agent assessment indicates that they will require further information on the technical solution proposed for SVAA and that this will impact their assessment;
- it has also been assumed that ELEXON testing of the changed systems will be undertaken in parallel. The availability of suitable testing resources has to be determined.

It must be highlighted that this is a very tight schedule. Based on the effort required to develop these changes to BSC Systems and documentation, an Implementation Date of 01 August 2003 is proposed. This estimate is based on an Authority determination received by 01 September 2002.

The upgrade to the version of Oracle and UNIX used by SVAA is required by the end of 2003 and involves significant development, with an approximate duration of 9 months. The Supplier Volume Group (SVG) have previously agreed that this upgrade is required to ensure continued support of the SVAA systems.

Therefore if a determination is received after 01 September 2002 (and before 30 June 2003) the proposed Implementation Date is 30 June 2004. Planning of the Oracle / UNIX upgrade project is progressing and there are discussions with the software developer about parallel development in order to bring forward this 2nd Implementation Date.

ANNEX A – PROPOSED TEXT TO MODIFY THE BSC

Attached as separate document

ANNEX B – P62 CONSULTATION RESPONSES

Attached as separate document

ANNEX C – BSC AGENT IMPACT ASSESSMENTS

Attached as separate document

ANNEX D – PARTY AND PARTY AGENT IMPACT ASSESSMENTS

Attached as separate document