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Modification Proposal P62 - Requirements Specification

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b Distribution

Name	Organisation
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c Change History

Version 0.1 issued for review within ELEXON

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d Changes Forecast

None

e Related Documents

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

1 DBFG Document - Requirements Specification – New Licensed Distributors, Version 0.4, 8 January 2002

2 Modification Proposal P62 – Initial Consultation, Version 1.0, 21 February 2002

3 Definition Report – Modification Proposal P62, Version 1.0, 8 March 2002

4 Logica SVAA Impact Assessment – LCRA191 - 08/02/02

5 Logica NHHDA Impact Assessment – LCRA192 – 08/02/02

6 MRA Executive Committee Paper MEC/02/01/05 – 29 January 2002

f Intellectual Property Rights and Copyright

CONTENTS TABLE

1 INTRODUCTION

1.1 General

This Requirements Specification has been prepared by ELEXON Ltd, on behalf of the Modification Group, 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.

The document supports the Assessment Procedure of Modification Proposal P62. Although sharing a similar title to [RD/1] it is a lower level document and is also specific to the BSC.

1.2 Structure of Document

The document is structured as follows:

- Section 2 provides a background to P62 and P70 and why they were raised;
- Section 3 provides an overview of the modifications and what they are trying to achieve, along with the status of unlicensed distribution networks under the current trading arrangements and the new obligations due to the Utilities Act;
- Section 4 describes the risks, assumptions and exclusions for P62;
- Section 5 provides an overview of the changes to the BSC, which are summarised from the draft changes in Annex A;
- Section 6 provides an overview of the proposed solution required to meet the requirements in Annex B, and further details are contained in subsequent sections:
    - Section 7 describes the changes to registration, which is one of the main impacts associated with P62. Some examples of how complex configurations may be addressed are also provided in Annex C;
    - Section 8 describes the changes to Market Domain Data required to represent the new many-to-many relationship between distributor and GSP Group;
    - Section 9 described the implications of P62 on the Supplier Volume Allocation (SVA) data flows;
    - Section 10 contains details on the changes to Entry Processing within the BSC;
    - Section 11 describes the expected changes to the BSCPs and Service Lines;
    - Section 12 provides a summary of the initial impact assessments performed for the SVAA and NHHDA software;
- Section 13 describes the changes to non-BSC changes which are required in support of P62;

1.3 Requirements

A part of their work the Distribution Business Focus Group (DBFG) produced a Requirements Specification [RD/1], which is also being used by MRASCo and SESL to define their changes to the Master Registration Agreement (MRA) and Settlement Agreement for Scotland (SAS). This document [RD/1] will continue to be used within P62 as a source of requirements, and a summary of the requirements is contained in Annex B.

When referenced within this document the convention will be [MR5.x.x] for mandatory requirements and [DR5.x.x] for desirable requirements.

2 BACKGROUND

2.1 Modification Proposal P62

The Utilities Act 2000 (which came into effect on 1 October 2001) 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 the changes to the Utilities Act were considered by the Distribution Business Focus Group (DBFG), an industry group established under the MRA Executive Committee (MEC). This 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 assumptions:

- no creation of new GSP Groups;
- all metering systems for a given distributor to be recorded in a single Supplier Meter Registration Service (SMRS), such that:
  - if a GSP Group contains Distribution Systems operated by more than one licensed distributor, the metering systems for the GSP Group will be split across more than one SMRS;
  - each SMRS (for any distributor that chooses to operate in more than one GSP Group) will need to support metering systems recorded in more than one GSP Group.

This can be summarised as:

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

TXU UK Ltd raised Modification Proposal P62 on 3 January 2002 in order to progress the BSC aspects of 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 recommendation for Option 7. The Volume Allocation Modification Group (VAMG) and consultation responses support this recommendation and 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.

Wherever this document uses the term P62 this should be taken to be synonymous with the DBFG Option 7.

2.2 Modification Proposal P70

The text of Modification Proposal P62 noted that the following additional change had been discussed at the DBFG, but was not intended to fall within the scope of P62:

> Changes to allow distributors to register within Central Meter Registration Service (CMRS) the boundary metering between two Distribution Systems in the same GSP Group. (Such metering is not required for the purposes of Supplier Volume Allocation,

but may be desirable for other reasons e.g. ensuring that the allocation of Distribution Use of System (DUoS) charges between Suppliers is equitable.)

During their initial work the DBFG categorised this change as a desirable requirement and also recognised that a wide range of views existed on the subject. The DBFG decided not to put at risk the core requirements of P62 and considered that the most flexibility would be obtained by raising this as a separate Modification Proposal, should a Party wish to do so.

P70 was raised by SEEBOARD on 1 March 2002 in order to progress this aspect of the overall new licensed distributor solution.

At the Panel meeting 14 March 2002 Modification Proposal P70 was submitted into the Assessment Procedure, to be progressed in parallel to P62, and a complete Assessment Report presented to the Panel on 13 June 2002.

3 OVERVIEW OF P62 AND P70

3.1 Current Trading Arrangements

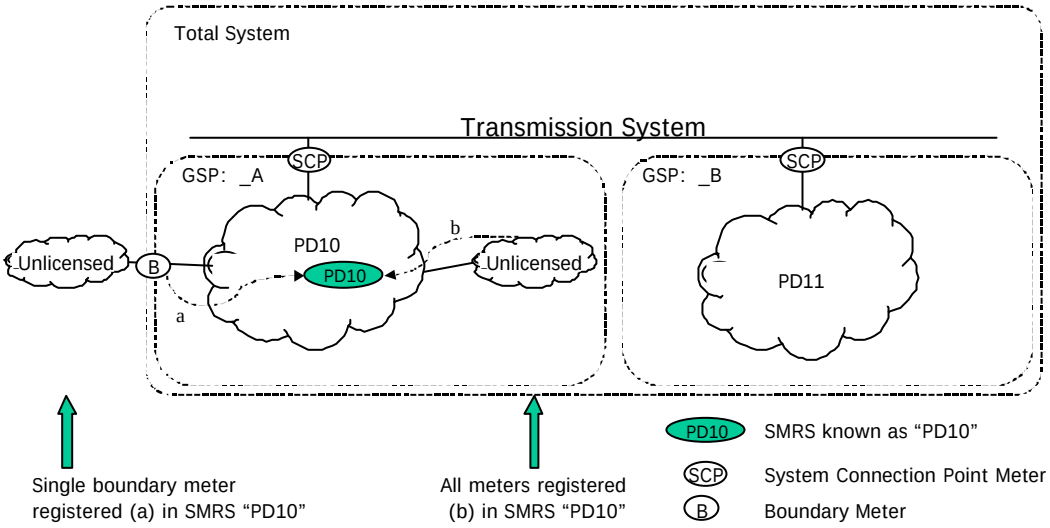
Prior to the introduction of the Utilities Act 2000 the only licensed distributors in England and Wales were the 12 Public Distribution System Operators (PDSO), i.e. the ex-PES distributors.

The current trading arrangements allow unlicensed[1] distribution networks[2] 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 "adopted"[3] 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 3.1 for two sample 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".

Figure 3.1 - Current Arrangements For 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 term "distribution network" is used within this document instead of "distribution system". In this respect 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. It does not imply any form of transfer of ownership or operation.

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 obligations remaining on the PDSO (the only required party to the BSC).

In addition meter dispensations (L3.4) have been used in the past for complex sites where "difference metering" can be used to provide competitive supply to a subset of the overall network. In this case the required subset of exit points are recorded in SMRS, and subtracted from the reading obtained at the boundary, to determine the remaining flow onto the unlicensed distribution network. This represents a combination of registration methods (a) and (b). It is assumed such exceptions will continue.

3.2 Utilities Act 2000

Following the implementation of the Utilities Act on 1 October 2001, distribution of electricity is now a distinct licensable activity, and as a result entities other than a PDSO may be obliged (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 PDSO are also issued with a Distribution Services Direction[4] that:

- specifies which requirements from Section C are to have effect, such as:
  - provision of an SMRS (Condition 37);
  - operation of a Data Transfer Service (Condition 38);
- specifies the Distribution Services Area within which they must comply with the additional obligations in Section C;
- a PDSO will only have Section C Distribution Service Obligations within its local geographical area i.e. its Distribution Services Area;

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.

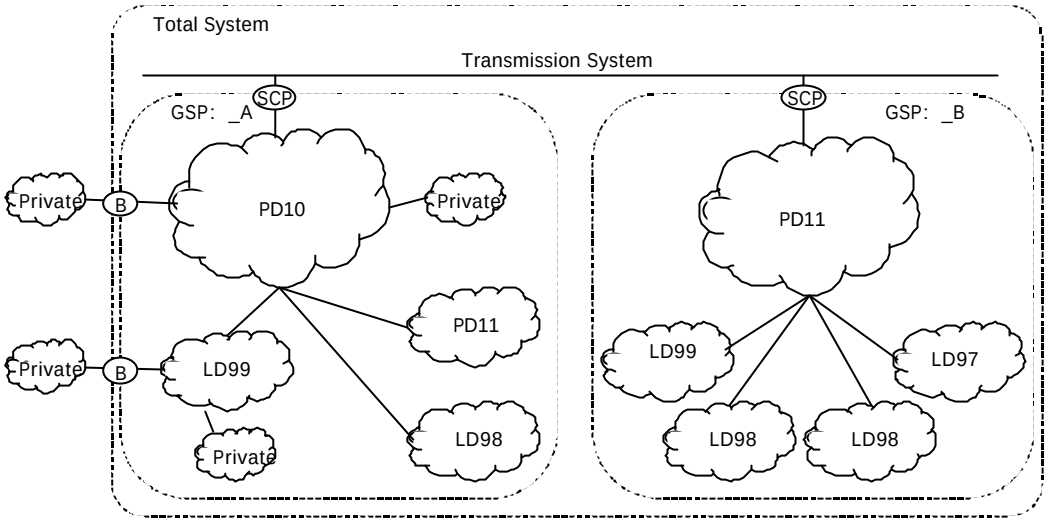
3.3 Modification Proposal P62

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.

[4] 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.

Figure 3.2 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.

Figure 3.2 – Example New Licensed Distributors and Distribution Systems



The key points to note about figure 3.2 and the potential networks are:

- the simplest case would be for a new licensed distributor (LD97) to have a single Distribution System registered in a single GSP Group (_B);
- 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 itself operate in multiple GSP Groups;
- a new licensed distributor (LD98) may have multiple distribution networks in the same GSP Group (i.e. _B), each of which is independently connected to the existing PDSO;
- 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;

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 will need to recognise all may occur, and hence the P62 solution must be sufficiently flexible to cope.

What is not shown in figure 3.2 is which SMRS are providing the registration services for each network. This is one of the key features of P62 and is 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 with GSP Group.

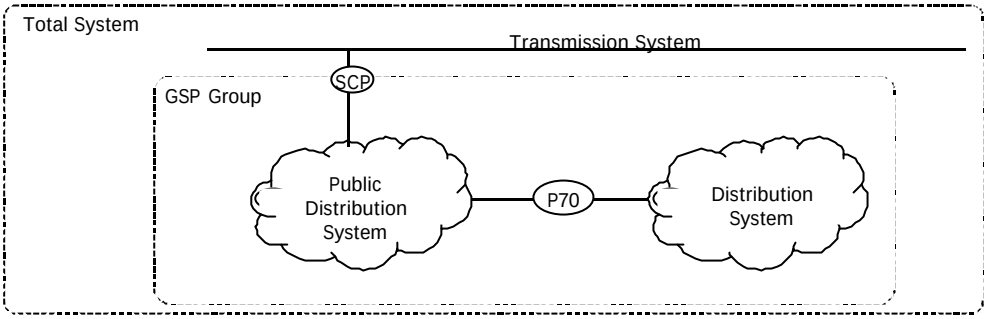
3.4 Modification Proposal P70

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 meters for the PDSO 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 the two Distribution Systems. This is shown in Figure 3.3 as "P70"

Figure 3.3 – P70 Example



As this 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 concerned [DR 5.8.1]. Hence SEEBOARD raised P70 to propose that the meter be allowed to register in CMRS [DR 5.6.2], and hence be treated as an industry standard meter.

3.5 Direct Connection to the Transmission System

The consideration of distributions networks which connect directly to the Transmission System adds additional complexity to the consideration of new licensed distributors, especially if this would result in the creation of a new GSP Group[5]. This was one of the factors in the DBFG decision to propose Option 7, as it was capable of working within the existing GSP Groups. It is also the main reason why the consideration of directly connected networks is considered outside the scope of P62.

However, the VAMG recognises that different types of directly connected networks may be handled in different ways, and that it is necessary to provide some detail on each type. One potential new distributor has also indicated that a directly connected network could be required within the two years envisaged by the VAMG. The VAMG also recognised that there could be a consequential change to the definition of a GSP Group as a result of the introduction of new Distribution Systems and changes to related BSC definitions.

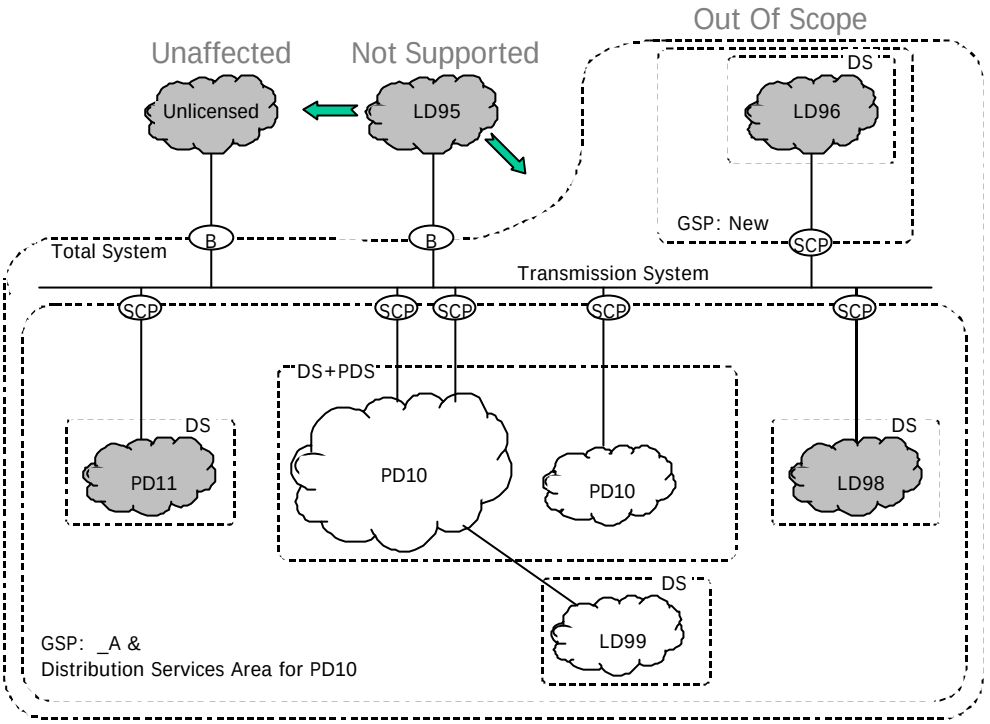
Figure 3.4 illustrates four potential categories of distribution network that could connect directly to the Transmission System:

- network recorded entirely in CMRS and not related to any SMRS or GSP Group, this could be operated by:
  - a commercial or industrial customer, or a third party operating an unlicensed network (i.e. Unlicensed); or
  - a licensed distributor (i.e. LD95);

[5] See Annex A of [RD/1] for a discussion on the Settlement issues associated with new GSP Groups.

- a new licensed Distribution System, recorded in SMRS and associated with a:
  - new GSP Group (i.e. LD96);
  - an existing GSP Group (i.e. PD11 or LD98);

Figure 3.4 – Directly connected networks



The status of each of these within Modification Proposal P62 is as follows:

- **unlicensed CMRS network** – there are a small number of directly connected customers, which are registered as BM Units in CMRS and are unknown to Supplier Volume Allocation (SVA). In some circumstances these may be providing services to a third party, however, the nature of their business is such that, although they may provide a small amount of domestic demand, they are exempt from requiring a Distribution License. These unlicensed networks are unaffected by P62;
- **licensed CMRS network –** this is similar to the previous category, except that the business requirement is for the small network to be operated by an existing licensed distributor. In such circumstances the distributor would already have the necessary infrastructure (such as SMRS) to open the network to competitive supply and hence could operate the network within SVA and a GSP Group (i.e. like LD98). Alternatively if the network was purely commercial and industrial, the distributor could decide to operate the network from within a subsidiary company and claim it was an unlicensed network (i.e. previous type), using Class C exemption[6] for a non-domestic network. The VAMG believed that these options are sufficient, and that a CMRS registered distribution network, operated by a licensed distributor, should not be supported within P62;

[6] Consideration of the exemption criteria for distribution networks is outside the scope of this document.

- **new licensed Distribution System, creating a new GSP Group** – a new licensed distributor may believe their network should form its own new GSP Group. There are a number of problems of ensuring the integrity of Settlement with such a proposition and it has been consistently argued that other BSC, and in particular BSC System changes, would be required and this should be considered as a separate Modification Proposal. Consideration of these networks is outside the scope of P62;
- **new licensed Distribution System, embedded in an existing GSP Group** – the combination of new licensed Distribution Systems, and the existing GSP Group definition in the BSC means that this option is currently not allowed. Remaining with the current BSC definition would force LD98 to be treated in the same manner as LD96 (already outside scope), and for PD11 to be placed in GSP Group "_B", even though this may geographically be in a different area of the country. In addition, condition 37 of the distribution licence would oblige the PDSO for PD10 to offer an SMRS to LD98, and hence force that SMRS to support multiple GSP Group operation. The VAMG do not believe this is in keeping with one of the prime objectives of Option 7, namely no new GSP Groups. The VAMG believe this conflict should be addressed by amending the GSP Group definition to "allow", but not "force", a new licensed distribution network to be accommodated within an existing GSP Group. The VAMG believe this is in keeping with "not considering directly connected networks", as it reduces the urgency to consider the implications of creating new GSP Groups. P62 will extend the definition of a GSP Group to allow a new directly connected Distribution System to be embedded within an existing GSP Group, in the same manner as LD99 would be.

In summary the VAMG believe that any changes to BSC defined terms (i.e. Distribution System and GSP Group) must be done in a manner that is sympathetic to allowing networks like LD98 and PD11 to be incorporated into an existing, and geographically close, GSP Group. Any additional system impacts to accommodate this should be identified.

4 RISKS, EXCLUSIONS AND ASSUMPTIONS

4.1 Risks

The changes in the Utilities Act 2000 that caused TXU UK Ltd to raised P62 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 then the new distributor would need to use the current trading rules and 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 the distributor would need to migrate all their existing Metering Point Administration Numbers (MPAN) to the new network. This migration process is outside the scope of P62 (See Section 7.4).

The integrity of Settlement relies on all MPAN 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 there may be a need to mitigate this risk by changes to the Performance Assurance Framework. This is currently outside the scope of P62.

4.2 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 – See Section 3.5 for a description of how this is being interpreted during the Assessment Procedure;
- **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 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 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.

4.3 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);
- 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;
- the assumptions relating to the MRA and Data Transfer Service (DTS), as described in Section 13, will be addressed in parallel to P62;
- there will only 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 the existing 12 PDSO distribution businesses. 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;
- the existing limit of using two digits to represent the distributor within the MPAN will be sufficient;
- there are no required changes to the Performance Assurance Framework and no requirement to measure the performance of distribution businesses;

5 BSC CHANGES

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.

5.1 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:

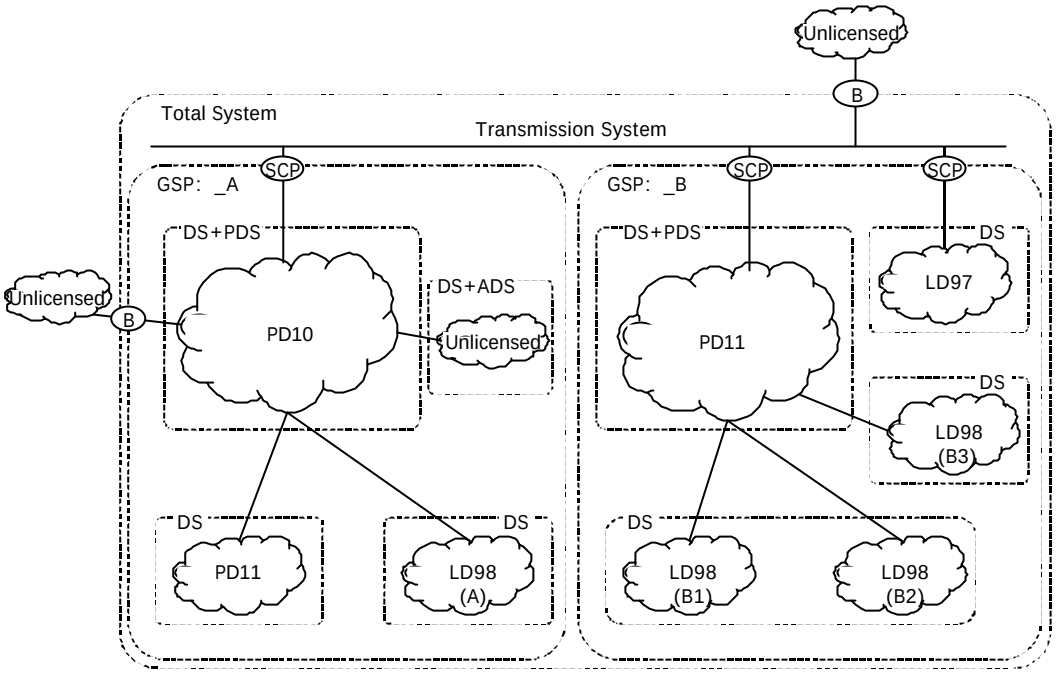
- a new term "Licensed Distribution System Operator" (LDSO) is introduced to refer to any Party which holds a Distribution License. This term will replace the majority of references to PDSO, which will become largely unused;
- the definition of a Distribution System is extended to include any distribution network operated by an LDSO. It is also amended to reflect that a single distribution system[7] operated by a LDSO may form multiple Distribution Systems, each within a different GSP Group;
- the GSP Group definition needs to be 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[8], 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 GSPs 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;
- a new term "Associated Distribution System" is introduced to describe any unlicensed Distribution System not operated by a LDSO, but for the purposes of registration and settlement identified as being "adopted" by the hosting LDSO. As far a the mechanics of registration and settlement are concerned, these are no different to normal Distribution Systems. However, the new definition helps the BSC legal drafting now that a Distribution Services Area no longer represents the operational boundary of a distribution business;
- 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.

Figure 5.1 shows how these new terms relate to an example network, based on those networks already introduced in figure 3.2. Each of the network clouds within the Total

[7] As defined by Section 4.4 of the Electricity Act, following amendment by section 28 of the Utilities Act 2000.
[8] See Section 3.5 for a discussion on why multiple direct connections to the Transmission System should be allowed.

System is part of a Distribution System, and optionally a Public Distribution System or Associated Distribution System.

Figure 5.1 – Distribution System Boundaries



DS - Distribution System
PDS - Public Distribution System
ADS - Associated Distribution System

The four networks operated by "LD98" are interesting. The network identified as "A" needs to be a distinct Distribution System, as it must be settled separately from those in GSP Group "_B". From the perspective of the BSC (i.e. the registration and settlement) it does not matter if the three networks "B1", "B2" and "B3" are considered as one, two or three Distribution Systems. They are shown in the figure as two to illustrate that the definition does not force any one interpretation.

5.2 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 provided assistance to any Supplier in accordance with BSCP512 (Section K);

- 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);

6 SOLUTION OVERVIEW

6.1 Scope

The P62, or Option 7, solution recognises that the original Stage 2 systems were designed with the assumption that distribution businesses and their boundaries were static.

The original design did not envisage the trading of distribution businesses, and this places certain limitations on how new licensed distributors can be incorporated into the existing solution, and in particular the data structures. One example of a conflict is the MPAN, which is expected to be both static, and also contain a reference to the distributor[9].

It must be recognised that, without significant redesign, the 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 existing requirement for new licensed distributors, it does not attempt to design for changes in the way licensed distributors may work, or any other future requirements.

This modification is currently in the Assessment Procedure, the primary objectives of which are to identify the BSC Changes (Section 5/Annex A), whether these changes better facilitate the Applicable BSC Objectives, identify the scale of the BSC System changes (Annex B) and provide an indication on the associated costs.

It is normal practice to perform the detailed solution design after a positive determination from the Authority. This would be performed as part of a formal implementation project, using change proposals (in accordance with BSCP40) to indicate the precise changes to the Service Specifications, User Requirements Specifications, BSC Procedures (BSCP) and Service Lines (SL).

However, it is recognised that P62 is a complex change, which is trying to achieve a significant business and functional change with what are small associated changes to the BSC. The detail in the following sections provides additional information on the expected system implications of this modification, in order to allow Parties to provide a more accurate impact assessment for their own changes. However, this document is not a system design and readers must recognise that, whilst every effort has been made to provide accurate details of the changes, this information may change during the formal design phase and subsequent implementation.

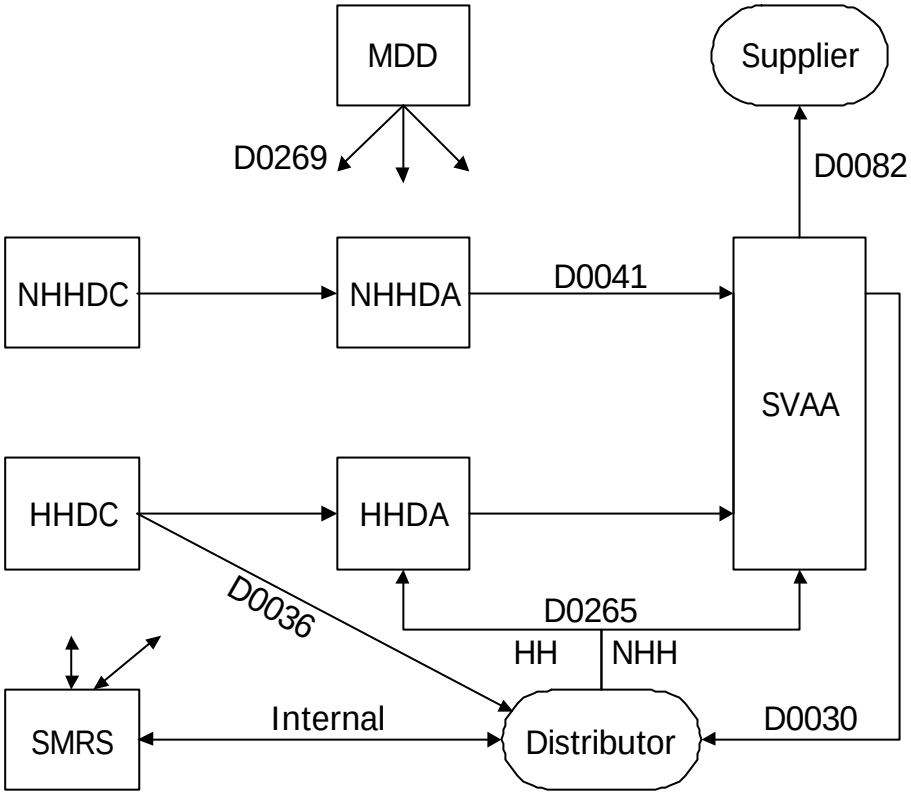
6.2 Description

The following section provides an overview of the proposed solution, in particular the changes required to allow multiple distributors to operate within multiple GSP Groups. Figure 6.1 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 entry groupings will now have multiple entries.

[9] DBFG Option 7 maintains the link between MPAN and distributor, and hence limits the capability to trade distribution businesses. Other DBFG options, which did not maintain this link, were considered to represent a more complex solution in relation to providing the basic infrastructure.

Figure 6.1 – 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. These issues are further explored in Section 7.
- as described at the beginning of this section SVA data flows, such as the Market Domain Data flows (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 Market Domain Data (MDD) application used to maintain the data. As MDD is a key element to the configuration of each system, Section 8 has been included to show how the expected changes to the MDD data will appear to systems;
- as stated only the logical structure within a number of the SVA data flows is expected to change in order to reflect multiple distributors within a GSP Group, these are further discussed in Section 9:
    - the half hourly side of Settlement aggregates data into Consumption Classes 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 Consumption Class (i.e. Metering System Id to support DUoS

charging) must be obtained from information provided in the D0036 sent from the HHDC to the distributor;

- in contrast it is the profiling function within SVAA that determines the meter readings 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 classes, 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 Line Loss Factor Classes 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. This is further discussed in Section 9.1;
- it is not currently anticipated that any major changes will be required to the Central Volume Allocation (CVA) systems;

6.3 Systems Impact

This modification will impact a large number of systems, including BSC Agent Systems, Supplier Agents and other systems used by Parties.

Change Proposals (in accordance with BSCP40) will be required for changes to SVAA, MDD and the ELEXON developed Non Half Hourly Data Aggregator (NHHDA) and Estimated Annual Consumption / Annualised Advance software. Section 12 already contains information obtained from initial impact assessments based on the original requirements in [RD/1]. These impact assessments will be refined, based on the updated information within this document.

However, changes will also be required 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. A high-level view of the changes to these non BSC Agent Systems will be obtained through the impact assessments to this document.

7 SMRS AND REGISTRATION CHANGES

Registration is primarily an activity governed by the MRA. The BSC is concerned with the resulting relationship between MPAN, SMRS and GSP Group. In addition the BSC has Entry Processes for SMRS and Suppliers which are dependent on the SMRS architecture.

7.1 SMRS Registration Architecture

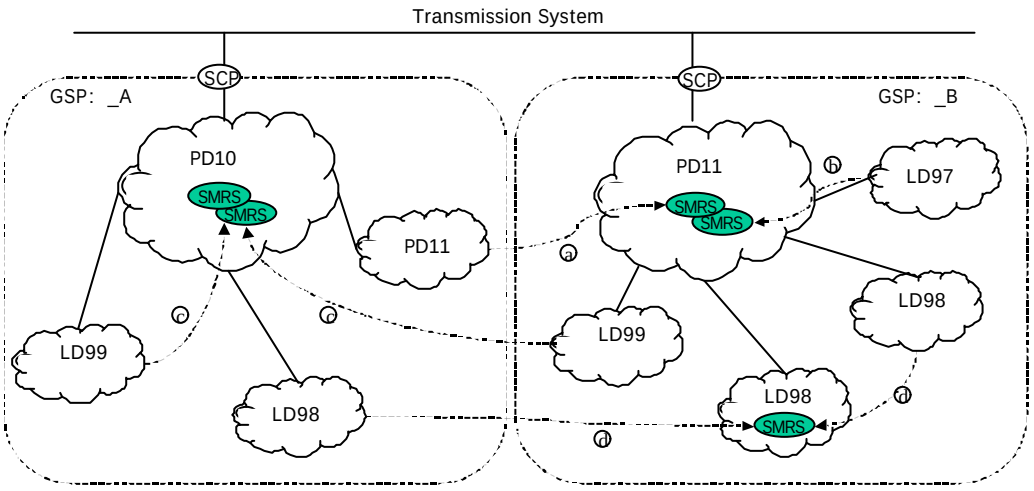
Within P62 each distributor is associated with one, and only one, SMRS service. Even if that SMRS is being operated by a third party, it will be still known by the Market Participant Id for the distributor associated with the relevant Distribution System.

Condition 37 of the Distribution License requires existing PDSO to operate a SMRS for any Distribution System within their Distribution Services Area. Should such a PDSO co-host the SMRS for this new distributor, along with the existing SMRS for their Public Distribution System, then they would still require two identities.

All data flows for the SMRS associated with the PDSO must be identified by the Market Participant ID for the PDSO (i.e. PD11), and any data flows for the new licensed distributor must be identified by the Market Participant ID for the new distributor (i.e. LD99) [MR5.1.3]. It is these identities, along with the Market Participant Role Code, which ensures that the Data Transfer Service (DTS) can route the data to the correct SMRS, which ever GSP Group the distributor is operating within, and without the need for a further mapping function between distributor and SMRS.

The impact of P62 on the SMRS architecture is shown in figure 7.1. Each of the new licensed distributors introduced in figure 3.2 is shown being registered to a variety of different SMRS.

Figure 7.1 – Distribution System Registration



In each case the first two digits of SVA Metering System Number[10] would be the number shown in each cloud (i.e. 10, 11, 97, 98 or 99) [MR5.1.1]. As can be seen it is no longer possible to determine the GSP Group from the MPAN.

Each Distribution System must also register with the GSP Group corresponding to the PDSO Distribution Services Area in which it is located [MR5.1.4].

It is assumed that an SMRS shown within a network cloud of Figure 6.1 already provides services to that Distribution System. For any SMRS enhanced to provide services outside an existing PDSO, dotted arrows have been used to indicate the responsible SMRS, and a label (a) to (d) to indicate one of the following options:

a) an existing PDSO that decides to operate in other GSP Groups will be expected to continue to use their existing SMRS, which will need to be capable of supporting multi GSP group operation. This is shown for PD11 also operating in GSP Group _A;

b) a new licensed distributor, who always intends to operate within a single GSP Group, can use the existing SMRS for that GSP Group. This SMRS may need to some changes in the service it offers to support multi-distributor operation. There is no licence obligation for such an existing SMRS to support operation outside the local GSP Group and hence the new license distributor would need to ensure they always intend to limit their operation to that particular GSP Group. This is shown for LD97 operating in GSP Group _B.

c) a new licensed distributor, who intends to operate within multiple GSP Groups, could use an existing SMRS (as for option (b)), however as there is no licence obligation on that SMRS to operate outside the local GSP Group, then the new licence distributor would need to ensure the SMRS was willing to offer this service and was capable of supporting both multiple GSP Group and distributor operation. This is shown for LD99 operating in both GSP Groups;

d) a new licensed distributor, who cannot find a suitable existing SMRS willing to operate in the required GSP Groups, or for their own financial / commercial reasons, may decide to operate or procure a new SMRS capable of operating in the desired environment. This is show for LD98 operating in both GSP Groups.

As already stated where an SMRS is providing services for two or more distributors (i.e. as shown in options (b) and (c)), the flows to and from each logical SMRS instance would be identified by the unique 4 character Market Participant Id associated with the network's own distributor, and not that of the host PDSO.

The wide range of potential combinations within P62 does not imply all combinations will become available. Those that do become available, and the specific SMRS and GSP Groups combinations, will to a degree be dependent on which options the existing and new licensed distributors consider commercially viable. Further consideration of this is outside the scope of P62, and P62 should ensure all potential options are supported from the perspective of the BSC.

The changes to SMRS systems are one of the main impacts of introducing new licensed distributors.

[10] The BSC term for the core Metering Point Administration Number (MPAN)

7.2 SMRS Meter Registration

The different SMRS configuration options will result in different demands on the SMRS software, depending on the complexity of the configuration, and in particular the manner in which the first two digits of each MPAN are determined.

Figure 7.2 show some sample metering systems connected to the Distribution Systems operated by PD11 and LD97. For clarity each MPAN is shown as a simple 6 digit number, rather than the full 13 digits (including a check digit). As this figure is to be used to support both pre and post P62 examples, the first two digits (shown as "xx") can only be determined when it is decided which distributor the MPAN will be associated with. The last 4 digits of each MPAN have also been defined to be unique across all Distribution Systems within the figure. This has been done to create clearer examples, and in the real world the last 11 digits of each MPAN are only required to be unique within each distribution business and hence SMRS.

Figure 7.2 - SMRS Meter Registration

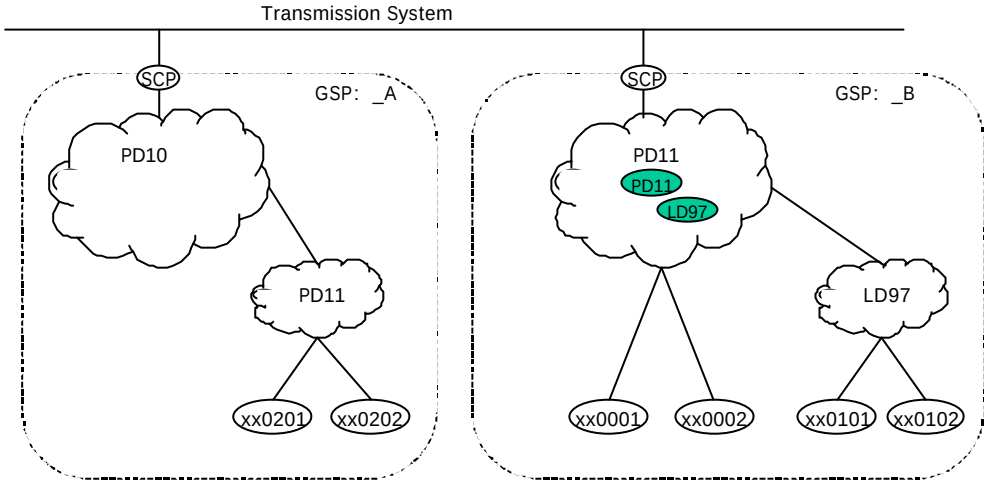
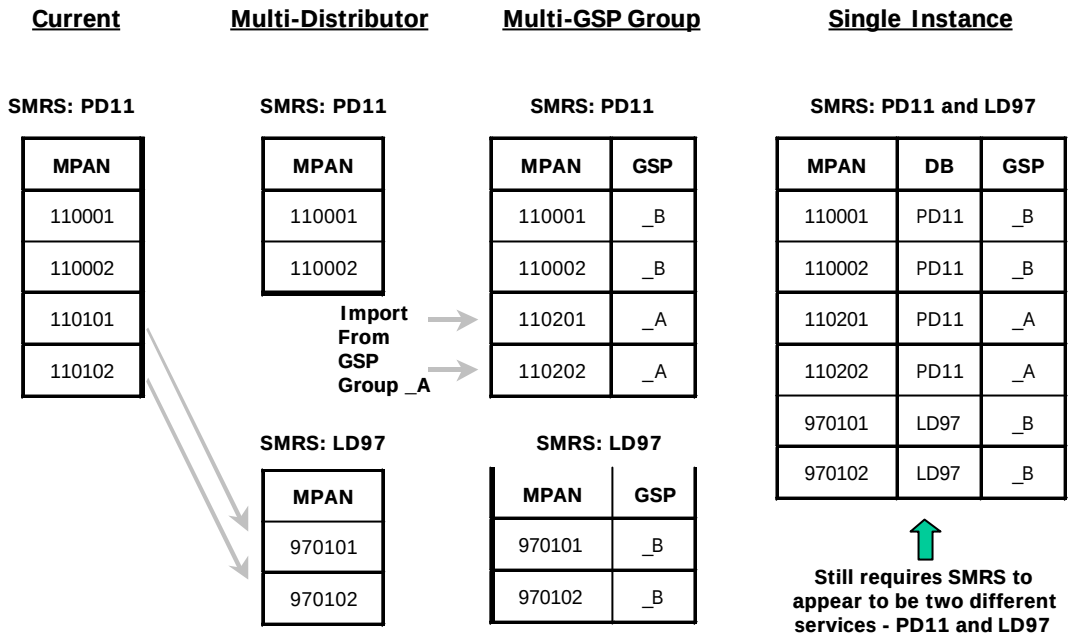


Figure 7.3 shows how these can be organised for the different SMRS configuration options, starting with the current architecture for handling unlicensed distribution networks[11] and ending with a single physical service that could support multiple distributors operating in multiple GSP Groups. The figure is limited to showing the registrations for PD11 and LD97, in addition those meters owned by PD11 and residing in GSP Group "_A" are not shown for the first two examples.

[11] This approach could also be used to register new licensed distributors prior to any changes resulting from P62.

Figure 7.3 - SMRS Meter Registration



The tables show only the entries of relevance to the architecture of the SMRS and in reality each entry would have associated other details, such as Profile Class, Standard Settlement Configuration, postal address, Supplier Id and MOP/DC/DA appointments. As you increase the complexity of the supported networks you increase the demands on the SMRS architecture[12]:

- Current – under the current (pre P62) trading rules the network "LD97" would be considered an unlicensed distribution network. To obtain competitive supply it would need to be "adopted" by the local PDSO and all entry and exit points registered in SMRS. It would not be necessary to explicitly store the GSP Group or distributor for each MPAN, as they would always be "_B" and "PD11". In this example the meters "xx0201" and "xx0202" would need to be adopted by PDSO for GSP Group "_A" and hence would become "100201" and "100202";
- Multi-Distributor – should P62 be approved then each PDSO may be required to provide SMRS services to another licensed distributor within their local GSP Group. One way of doing this would be to introduce a new parallel SMRS server alongside the version required for the PDSO. This is possible as the service name for each SMRS will be that of the distributor "PD11" or "LD97". Alternatively the new licensed distributor may decide to run this server and service themselves. This configuration differs from the current approach as the meters previously "adopted" would be registered in the new SMRS, with an MPAN starting "97";
- Multi-GSP Group – should a distributor wish to operate in multiple GSP Groups then their single SMRS would need to explicitly store the GSP Group for each MPAN, rather than being able to deduce it from the environment. This cannot be achieved by running another SMRS instance, as can be done for multi-distributor, as the service name for the SMRS will be same in each case. In Figure 7.2 the two MPAN that previously would

[12] It should be noted that the presence of this description does not imply anything about the existing SMRS implementations, which may already be able to support some of the more complex configurations. Its purpose is purely to illustrate the increasing complexity of the data model underlying each configuration.

have to be recorded by "PD10", could instead now be recorded[13] in the SMRS for "PD11", and hence the MPAN will become "110201" and "110202".

- Single Instance – the ultimate configuration may be for a single physical SMRS server to support multiple distributors operating in multiple GSP Groups. This would require the SMRS to store[14] the identity of the distributor for each MPAN, as it would still need to appear to the DTS as two different SMRS. Such a solution would also need to consider issues related to any requirements for separation of business data.

7.3 SMRS to LDSO Communication

Prior to the consideration of P62, Supplier Meter Registration Agent (SMRA) is effectively a synonym for the associated PDSO. Therefore any communication between the two, such as recording and notifying skeleton MPAN, is within the same organisation and hence able to cope with interfaces which are classed as "internal". As a result of P62 the SMRA may not be in the same organisation as the LDSO and hence the efficiency of communication between the LDSO and SMRS could be a key issue in providing a competitive or efficient service.

Further consideration of this issue is outside the scope of P62 and is being considered by the DBFG. It is currently anticipated that there will be no changes to the BSC as a result of this consideration.

7.4 Logical Disconnection to move to a new Distributor

As stated in section 4.2 the transfer of assets from one distribution business to another is excluded from the scope of P62. Although a significant issue, this is not limited to P62 and is already an issue for existing PDSO. What will change is the probability, or incidence rate, of a robust solution being required.

The main issue is that the MPAN for the asset is prefixed with the identity of the distributor and hence a change in ownership may require a new MPAN.

Should a change of ownership be required then there are two options:

- in the case of a total transfer of all assets to a new distributor (i.e. in the case of distributor failure) then the new distributor could continue to run the existing systems and use the original MPAN;
- in the case where a subset of the assets are transferred, then the MPAN would need to be changed and this would involve logical disconnection and then creation of a new connection for all MPAN. Any loss of Metering System history and synchronisation issues would need to be solved by the distributors involved;

Further consideration of this is outside the scope of P62;

[13] This is not meant to imply the existence of a suitable MPAN transfer process
[14] Technically it could be deduced from the start of the MPAN, however, that would itself be new functionality and the idea of the table was to highlight the potential complexity.

8 MARKET DOMAIN DATA

8.1 Overview

The D0269 flow (Market Domain Data) must contain all the data required to represent the new distribution entities. The following section describes the updated entries within this flow, namely:

MAP – Market Participant;
MPR – Market Participant Role;
GSP – GSP Group;
GGD – GSP Group Distributor [MR5.5.1];
PAA – PRS Agent Appointment [MR5.5.1];
LLF – Line Loss Factor Class [MR5.1.5];
MPA – MTC in PES Area [MR5.2.5].

It is important to note that all of these definitions are already capable of representing multiple distributors within a GSP Group and hence there is no change to the formal definition of the flow – it is only the contents that change.

A subset of the BNF for this file is shown below:

MDD …. {MAP_set} {GSG_set} {LLF} {MTC_set}….

The data item "LLF" is a simple repeating item within the file, however the other data items are part of a repeating groups:

MAP_set ::= MAP {MPR_set}
MPR_set ::= MPR {ADL}
GSG_set ::= GSG {GGD} {PAA} {IAA}
MTC_set ::= MTC {MPA (VML_set|VMS_set)}

The rest of this section shows the updates to the MDD in order to represent the registrations already introduced in Figure 7.1.

The MDD maintenance application is run by CAP Gemini and this will need to be updated to allow it to input the required changes.

In line with the assumptions in Section 4.3 it is assumed that these changes will not significantly increase the volume for the D0269 flow[15].

8.2 Market Participant Data

The Market Participant {MAP} and its related Market Participant Roles {MPR} data will contain new SMRS entries "P" and Distributor entries "R". This will also provide agents with the ability to convert between the Distributor Short Code (i.e. 11) and Market Participant Id (i.e. PD11).

[15] This is based on an underlying assumption that new licensed distributors will not require to register a large number of historic meter configurations.

Table 7.1 – Market Participant Roles

MAP Entry	MPR Entry		
Market Participant Id	**Market Participant Role Code**	**Distributor Short Code**	**New?**
PD10	P		No
	R	10	
PD11	P		
	R	11	
LD97	P		Yes
	R	97	
LD98	P		
	R	98	
LD99	P		
	R	99	

8.3 Distributor/SMRS to GSP Group Mapping

The ability to record which distributors and SMRS are operating in each GSP Group is held in the GSP Group {GSP} data structure. The formal structure of the flow already allows the many-to-many relationships to be coded.

Within this structure the first entry is the GSP Group Distributors {GGD} data and represents the following data:

Table 7.2 – GSP Group Distributor

GSP Entry	GGD Entry		
GSP Group Id	**Market Participant Id**	**Market Participant Role Code**	**New?**
_A	PD10	R	No
	PD11	R	Yes
	LD98	R	
	LD99	R	
_B	PD11	R	No
	LD97	R	Yes
	LD98	R	
	LD99	R	

Table 7.3 – PRS Agent Appointment

In addition the PRS Agent Appointment {PAA} data would need to represent the following:

GSP Entry	PAA Entry		
GSP Group Id	**Market Participant Id**	**Market Participant Role Code**	**New?**
_A	PD10	P	No
	PD11	P	Yes
	LD98	P	
	LD99	P	
_B	PD11	P	No
	LD97	P	Yes
	LD98	P	
	LD99	P	

8.4 Line Loss Factor Classes

The Line Loss Factor Classes {LLF} data associated with a distributor operating in multiple GSP Groups will change to hold new defined classes. This information will be restricted to one set of data per distributor, and not a set per distributor per GSP Group.

Table 7.4 – Line Loss Factor Classes

Market Participant Id	Market Participant Role Code	Line Loss Factor Class Id	Line Loss Factor Class Description
PD10	R	1	Domestic
PD10	R	2	HHSite 1
PD11	R	1	Domestic (A)
PD11	R	2	Domestic (B)
PD11	R	3	HHSite 2 (A)
PD11	R	4	HHSite 3 (B)
LD97	R	1	Domestic
LD98	R	1	Domestic (A)
LD98	R	2	Domestic (B / Net 1)
LD98	R	3	Domestic (B / Net 2)
LD98	R	4	HHSite 4 (B / Net 1)
LD98	R	5	HHSite 5 (A)
LD99	R	1	Domestic (A and B)

The table shows examples of how each network operated by a distributor could use the same set of Line Loss Factor Classes, even though some of them may only be applicable to one GSP Group[16]. The table shows how for all distributors, except LD99, each physical Distribution System has its own "Domestic" class. However LD99 uses the same class, and hence a single value, for both GSP Groups (i.e. _A and _B). In contrast LD98 has chosen a different classes for each network (i.e. Net 1 and Net 2) within GSP Group _B.

This linkage between the distributor and the numeric Line Loss Factor Class Id is important to note. With the BSC the Line Loss Factor Class is the combination of both values and hence the subscript "L", used extensively in Section S, is also a combination of the two[17].

8.5 Meter Timeswitch Codes

The Meter Timeswitch Code {MTC} data is split into two groups, the common and distributor specific data. Although the second of these is called "MTC in PES Area" it does in fact refer to the 4 character Market Participant Id of the distributor and not something geographical like the GSP Group[18]. This means that P62 will work within the existing format and simply result in additional entries for each distributor. The same comments made relating the LLFC in the previous section apply to the management of this data.

[16] It should be noted this approach assumes all LLFC are valid for all GSP Groups and does not allow further validation.
[17] A note will be added to the BSC to clarify that when terms, such as SPM_{HZaLPR} , are used, that the combination of the subscripts H and L will refer to a specified LLFC / distributor combination (L) within the specified GSP Group (H), there will be no explicit subscript for the distributor.
[18] This term will be changed to make it more clear that it relates to a distributor.

9 SVA DATA FLOWS

9.1 Determination of GSP Group

As P62 allows distributors to operate in multiple GSP Groups it is no longer possible for systems to determine the GSP Group using the first two digits of the MPAN and this information must always be obtained from one of the data flows.

The GSP Group must initially be allocated when recording a skeleton MPAN. The MRA definition of a Skeleton Record already contains the GSP Group and identifies it is the distributor that is responsible for completing this record.

Once initially recorded by the SMRS, this value is sent to a number of agents in flows where the Metering System ID is also present (Table 9.1). The exception is the HHDC, although analysis suggests that the GSP Group is not required for the purposes of Settlement. One possible area of concern was determining estimated readings, however, BSCP502 states that the data is limited to past performance of the that meter and global (not GSP Group) coefficients.

Table 9.1 – SVA Data Flows containing both GSP Group and Metering System ID

Ref	Description	From	To
D0019	Metering System EAC/AA Data	NHHDC	NHHDA
		NHHDC	Supplier
D0052	Affirmation of Metering System Settlement Details	Supplier	NHHDC
D0152	Metering System EAC/AA Historical Data	NHHDC	NHHDC
		Supplier	NHHDC
D0171	Notification of PDSO Changes to Metering Point Details	SMRS	Supplier
D0209	Instruction(s) to Non Half Hourly or Half Hourly Data Aggregator	SMRS	HHDA
		SMRS	NHHDA
D0217	Confirmation of the Registration of a Metering Point	SMRS	Supplier
P0171	Request Creation of UMS Skeleton SMRS Record	LDSO	SMRS

Concern has also been expressed about the ability of the NHHDC to obtain the necessary data even though table 9.1 shows they receive the D0052 and D0152 flows. The basis of this concern is that there are already exceptions caused by the timing of some of these flows, and a P62 compliant system would continue to be impacted by, or possibly increase the occurrence of such exceptions.

There have also been concerns expressed about the ability of a Supplier to establish the identity of the SMRS when starting a Change of Supplier process, if the MPAN is not readily available from the consumer. This will be made more difficult as the Supplier will no longer be able to assume the SMRS for the local area. In future the Supplier will need to either use the set of SMRS produced Address CDs, or another system, such as the proposed Meter Point Information Access Service (also referred to as MIDAS).

These assumptions will need to be validated by industry impact assessment and addressed within the governance of the MRA.

9.2 D0265 – Line Loss Factor Data File

The BNF for this file (excluding header/footer) is:

DIS {LLF {SDT { SPL }}}

Within this file the important item is {DIS} which defines the distributor. There is no reference to GSP Group which gives rise to the limitation that each distributor only has one set of LLFC no matter how many GSP Groups they operate within.

The LLFs associated with each class must reflect the losses on both the embedded and the host Distribution Systems, to create a single figure to represent the losses back to the GSP (BSC K1.7.6).

9.3 D0041 – Supplier Purchase Matrix Data File

The BNF for this file (excluding header/footer) is:

ZPD {SUP SPM { SPM}}

Within this data file the important item is {SPM} which defines the Supplier Purchase Matrix (SPM). They key data items within this matrix are:

- Profile Class Id
- Distributor Id
- Line Loss Factor Class Id
- Standard Settlement Configuration Id
- Time Pattern Regime Id

Therefore the "Distributor Id" field will cause a new group of entries to be defined for every distributor operational within a particular GSP Group (which is defined in the {ZPD} entry).

9.4 D0082 – Supplier Purchase Matrix Report

This report is based on the information in D0041 file, and hence reflects the changes to the SPM within that flow. The BNF for the D0082 flow (excluding header/footer) is:

SUP { GSP { DA { CON }}}

Within the report the SPM is held within the {CON} construct, and has the same key data items as the D0041. This will result in a new set of entries for each distributor operating within the GSP Group (defined in the {GSP} entry)

9.5 D0030 – Non Half Hourly DUoS Report

There are two versions of this file, one for suppliers and one for distributors. The BNF for these files (excluding headers and footers) is very similar:

Supplier: SUP { DIS { GP1 { VMR SPX TOT }}} HD2 SU2 {CCC} {SP2}
Distributor: { SUP DIS { GP1 { VMR SPX TOT }}} HD2 SUP {CCC} {SP2}

The Supplier variant allows only one {SUP} entry at the start of the file, whereas the Distributor variant allows multiple {SUP} and {DIS} entries (the {DIS} entry is always that of the distributor). Each variant is capable of storing multiple GSP Groups {GP1} per distributor and hence can express the necessary many-to-many relationship between distributor and GSP Group.

It is the {VMR} record that holds the SPM and hence has the same key data items as the D0041 input file (including another reference to the distributor).

SVAA will need to be changed to ensure the reports only go to the correct distributor [MR5.6.1] (See Section 12 for further details).

9.6 Central Volume Allocation Flows

Table 9.2 shows those data flows that are associated with Central Volume Allocation (CVA) and are also used to communicate with distributors

Table 9.2 – CVA Flows

Rec From	File Name	File
CDCA	C0121	CDCA-I012: Report Raw Meter Data
	C0141	CDCA-I014: Estimated Data Report
	C0291	CDCA-I029: Aggregated GSP Group Take Volumes
	C0301	CDCA-I030: Meter Period Data for Distribution Area
	LM005	CDCA-I018: MAR Reconciliation Report
	LM006	CDCA-I019: MAR Remedial Action Report
Send To	**File Name**	**File**
CRA	R0081	CRA-I008: Interconnector Registration Details
	R0271	CRA-I027: GSP Group and GSP Registration R0271

Each of these is associated with the operation of the GSP Group, rather than Suppliers within the GSP Group. For instance when the CDCA-I012, which reports raw meter data, is sent to a distribution business then it contains details of the GSP meters. The CVA documentation already correctly refers to “Distribution Business”, however it is expected that these flows will primarily be of interest to the PDSO. Should an embedded distribution business require the information, then it should be obtained using flexible reporting.

10 ENTRY PROCESSES

10.1 Overview

Requirement [MR5.2.2] states that each Supplier Hub (i.e. Supplier and associated Agents) and SMRA should go through an ELEXON Entry Process prior to use. There are two BSCPs which are relevant to Entry Processes for a new distributor:

- BSCP511 - Entry Process - Supplier Meter Registration Service
- BSCP512 – Entry Process – Supplier

Entry Processes within the BSC concentrates on ensuring the integrity of Settlement and this means the obligations are primarily on the provider of the SMRS and Suppliers, and not directly on the new distributor. Any entry testing for the new distributor is under the governance of the MRA.

BSCP511 is primarily targeted at the core requirements for the initial registration of the SMRS associated with the 12 PDSO. In contrast BSCP512 is more comprehensive providing the additional interface tests, and ensuring sufficient tests are executed whenever the first, and then each subsequent, Supplier registers against a particular GSP Group.

The current practice is to test each Supplier Hub for use within each GSP Group. The P62 Definition Procedure determined that GSP Group was being used as a surrogate for SMRS and that requirement [MR5.2.2] should be applied to each Supplier Hub and SMRS combination. The VAMG did not believe it was necessary to test each combination of Supplier Hub and SMRS within GSP Group.

Due to the fact that proposed changes affect the function of SVA participants rather than SVA data flows, it is considered appropriate that the majority of new testing should be functional, rather than interface testing. This will also avoid repeating interface tests already undertaken between previously tested combinations (i.e. Supplier to MOA/DC/DA and between these participants and the existing PDSOs). However where new LDSOs are introduced there clearly will be a requirement for interface tests, as existing Suppliers and their Party Agents will not previously have tested ‘against’ these new participants.

It is not possible to determine the precise level of Entry Processes which is appropriate until there is a full picture of the level of change required to each SMRS and the Supplier Agents. The following section is based on the current understanding and will be refined as more information becomes available.

10.2 BSCP511 - SMRS

Each SMRS is identified by the 4 character Market Participant Id of the licensed distributor [MR5.1.3] and hence even an existing PDSO, using existing software to provide SMRS for a new LDSO, would appear to be a new SMRS. It is necessary to ensure the level of SMRS Entry Processes is tailored to the underlying level of change associated with the new service.

Even if an existing PDSO is providing a parallel service for a new LDSO, alongside their existing SMRS, it is important to recognise there may be a requirement for additional tests. Interfaces between the LDSO and the PDSO/SMRS, which prior to P62 were “internal”, may

now be open to another commercial company. In order to test this new business functionality, without imposing a full retest of the SMRS, it is proposed that such SMRS are categorised and tested as "multi-distributor" to show that their operator is capable of supporting multiple distributors.

It is proposed that each SMRS is categorised as:

- Single Distributor / Single GSP Group (default value for existing SMRS);
- Single Distributor / Multiple GSP Group;
- Multiple Distributor / Single GSP Group;
- Multiple Distributor / Multiple GSP Group;

This will clearly identify the tested capabilities of each SMRS, and BSCP511 will need to define the required tests to achieve each of these categories, such that:

- any PDSO that continues to operate its existing SMRS, within its current Distribution Services Area (to all intent and purposes a single GSP Group), and provides no SMRS support to a new licensed distributor, should not be required to perform any additional tests;
- any PDSO that wishes to operate outside its current Distribution Services Area, or support another licensed distributor, should only be required to perform those additional tests required for their new category – i.e. multi distributor and/or multi GSP Group;
- a new entrant, or a significantly altered SMRS, should be subject to the full range of tests for the category they wish to claim.

Table 10.1 shows the new categories of SMRS functional tests, and which tests can be used to upgrade the tested level of an existing SMRS. Any new entrant would be required to execute the existing test scripts (currently 44) defined within BSCP511, as well as the additional test requirement contained within this table.

Table 10.1 SMRS Functional Tests

Description	New	Extent of additional testing
SMRS		None (no change)
SMRS (Multi distributor)	Y	Perhaps 2-3 extra test scripts
SMRS (Multi GSP Group)	Y	Perhaps 2-3 extra test scripts

The drafting of BSCP511 must also place an obligation on the SMRS to go through further testing should an SMRS require to change its tested category.

To provide a clear baseline it is suggested that all existing Supplier hub certificates produced to date via BSCP512 should be re-issued (consolidated to one certificate per Supplier). In the re-issued certificates the current GSP Group would be replaced by the Market Participant Id of the existing PDSO/SMRA, and the SMRS category being set to single distributor/single GSP Group. This will also apply to BSCP512.

10.3 BSCP512 - Supplier

BSCP512 will need to recognise the implications of having different categories of SMRS support, and also any related changes to the Supplier Agent software to enable them to communicate with multiple LDSO/SMRS within a single GSP Group.

It is recognised that new (or modified existing) functional tests will be required for all agents, such that existing Supplier Agents will only be required to undertake an additional set of tests for any new P62 functionality, as shown in Table 10.2 (xx can be HH or NHH). New Supplier Agents will be expected to run the full set of tests for that agent type.

Table 10.2 Supplier Functional Tests

Description	New	Extent of additional testing
Supplier		None (no change)
Supplier (Multi distributor within GSP Group)	Y	Perhaps 2-3 extra test scripts
xxDA		None (no change)
xxDA (Multi distributor within GSP Group)	Y	Perhaps 2-3 extra test scripts
xxDC		None (no change)
xxDC (Multi distributor within GSP Group)	Y	Perhaps 2-3 extra test scripts
xxMOA		None (no change)
xxMOA (Multi distributor within GSP Group)	Y	Perhaps 2-3 extra test scripts

Unlike the TA2000 project, which involved an initial set of tests to “prime” the new arrangements, it is proposed that any testing of Supplier Agents is performed when the agent is first involved in an Entry Process which involves a multi-distributor hub. This will require the Entry Process Co-ordinator (EPC) to keep a record of tested agents and notify the Supplier and/or agent when there is an attempt to use a non P62 compliant agent for the first time.

As there is currently no plan to change existing SVA data flows, the VAMG believe the aim should be that all existing interface test results remain valid. Where new LDSOs are introduced there will be a requirement for new interface tests, as these will be required to introduce these new participants to the market in combination with those already operating.

It may be necessary to introduce some new core interface tests, to recognise the changed, and more flexible, role undertaken by a distributor. This is shown in the notes for Table 10.3, in which non-shaded cells are used to indicate where there are potential interfaces to test. If such tests were added it may also be appropriate to assume that all existing PDSO/SMRS have already passed these new tests.

Table 10.3 Modified Supplier Interface Tests

	Supplier	SVAA	LDSO	SMRS	xxDA	xxDC	xxMOA
Supplier							
SVAA							
LDSO	4	3					
SMRS			2				
xxDA			1				
xxDC							
xxMOA							

Notes 1 This test is only required for LDSO to HHDA.

2 For new LDSO it is likely that the SMRS will be sub-contracted to a third party and these tests will exercise any “internal” flows.
3 Change in D0030 and existing flows (D0265, P0034, P0035, P0186)
4 A number of existing flows (D0010, D0139, D0142, D0150, D0265, P0170)

Using this model it is likely that the first Supplier to test against a new SMRS/LDSO would be required to execute 11 of the interface tests (4 core + 3 Non-Half Hourly + 4 Half Hourly), whereas a subsequent Supplier, who uses those same agents, will only have to run those tests related to the Supplier (2 core). This is shown in table 10.4, where the number in each cell is used to indicate a test run for Supplier 1 and/or Supplier 2. Those marked with “*” would need to be run twice, once for HH and once for NHH.

Table 10.4 Example Supplier Interface Tests

	Supplier	SVAA	LDSO	SMRS	xxDA	xxDC	xxMOA
Supplier							
SVAA							
LDSO	1+2	1					
SMRS	1+2		1				
xxDA			1	1*			
xxDC			1*				
xxMOA			1*				

This is only an example to give an impression of how it is planned to address Supplier Entry Processes and it should be noted that it may be necessary to specify additional interface tests, especially if there are any significant changes to Supplier Agent software.

11 BSCP/SL CHANGES

This section provides an overview of the proposed changes to the BSCPs and Service Lines (SL). The nature of the current documents means the effort required to rectify what would have become incorrect information is small. However, it is also recognised that additional new information may be required to expand on existing information, in order to clarify new or modified obligations. One such example is the procedures to be followed for a new distributor to initially start operating, and subsequently should they decide to start operating in another GSP Group.

In addition other BSCP and SL changes may be required as a result of amendments to the MRA, that are related to new licensed distributors, but not directly related to Settlement and hence outside the scope of P62.

The precise changes to the BSCPs and SLs will be defined using Change Procedures (in accordance with BSCP40) once the modification has been approved. This will also allow for such additional explanations to be added where required.

11.1 Global Changes

A major part of updating these document is to make the following global changes to all BSCPs and SLs.

Old Term	New Term
Public Distribution System Operator	Licensed Distribution System Operator
PDSO	LDSO

In addition whenever the term “Distribution Services Area” is used then it may be necessary to change the reference to refer to a LDSO and its Distribution System(s) and Associated Distribution System(s). In some circumstances a combination of both terms will still be required, where there is still a need to provide services within a Distribution Services Area, as well as to the physical Distribution Systems operated by the LDSO.

11.2 Entry Processes

This section covers the following documents

- BSCP511 – Entry Process - Supplier Meter Registration Service
- BSCP512 – Entry Process – Supplier

These documents are quite complex and describe the tests to be run for various scenarios. They also reflect the options available with the introduction of NHH Agent Competition in the TA2000 programme. This is no longer required and should be removed to simplify the options which will now exist for the four categories of SMRS and changes in the Supplier Agent software, described in Section 10 of this document.

It is believed that the current approach used to represent the options associated with NHH Agent Competition, can be re-used to represent the new options required for multiple distributor within a GSP Group.

11.3 Unmetered Supplies

This section covers the following documents

- BSCP520 - Unmetered Supplies Registered in SMRS
- New Party Service Line

The introduction of new Distribution Systems may mean that additional unmetered supplies will be required on these networks. As these will be owned by the new LDSO it is appropriate that the obligations to maintain an inventory of unmetered supplies is extended to the LDSO.

There is a belief that the existing obligations for unmetered supply are not particularly clear and that this will impact new LDSO taking on new responsibilities for unmetered supplies. It is proposed that as part of P62 a new Party Service Line is created to explain these obligations.

In addition the term “Unmetered Supplies Operator (UMSO)”, which is used extensively within BSCP520, is being introduced as a new BSC term. This will provide a clearer indication of when a LDSO is acting in its capacity as the provider of unmetered supplies.

12 SVAA AND NHHDA CHANGES

An initial impact assessment on P62 for SVAA [RD/4] and the ELEXON maintained software for NHHDA [RD/5] has indicated the following changes are needed. These changes are extracts and have not been altered to reflect recent developments, their context within this document, or any use of we/Logica.

The LCR162 referred to in this section is also known as SIR R2180 – Impact of Inaccurate Standing Data on Stage 2 Settlement – See Pool Change Management Circular 1291 for further details.

As a result of the observations regarding LCR162, made within this SVAA impact assessment, the VAMG considered that desirable requirement 5.7.1 should be removed. Any discussion regarding requirement 5.7.1 within the following section can be ignored.

This initial assessment will be reassessed as part of the impact assessment process against this requirements specification.

12.1 SVAA Functional Changes

12.1.1 Database structure, to allow multiple Distributors for each GSP Group

No change is required to the ISRA/SVAA Logical Data model to allow Multiple Distributors to be active in a GSP group, (although changes are required at the physical level and these are discussed in later sections of this document).

12.1.2 Maintenance and View Screens to allow New Distributors to be registered for each GSP group

In order to allow multiple distributors per GSP group to be maintained via the ISRA/SVAA Client it is necessary to remove the restrictive validation that is currently present in the "Specify GSP Groups for Distributors" screen. This validation will be modified so that an error message is only returned if the effective periods for the same Distributor in a single GSP Group overlap. The "Specify GSP Groups for Distributors" form will be modified to allow assignment of multiple Distributors to a single GSP Group. Additional validation will be added to ensure that multiple Distributors per GSP Group relationships cannot be created for any settlement days before the date from which this change is to be effective on the system. There will be no validation to check that a correct number of Distributors are active in a GSP group. There will however be validation that there is at least one Distributor active in a GSP Group on every settlement day – this is consistent with the present level of validation within this form.

The corresponding "Browse Association of Market Participant with GSP Group" form will be amended to provide multiple rows rather than one single row to display the Distributors active in the specified GSP Group. These two forms will now allow the user to create and maintain relationships for Multiple Distributors in a GSP Group.

The "Edit/Browse GSP Groups for Distributors" forms do not require changing since they list GSP Groups for a given Distributor, rather than vice versa.

12.1.3 Supplier Purchase Matrix load mechanism (D0041)

The current D0041 load process assumes that the all the LLFCs in the D0041 must refer to those of the single Distributor that is active in the GSP Group for that Settlement day. The LLFCs present in a GSP Group may now belong to of any of the many Distributors active in a GSP Group on the given Settlement Day, and hence the load mechanism will be amended to cope with this.

12.1.4 SSR Runs

We have confirmed that the Run SSR form does not require modification. The SSR Run process itself will need to be modified to handle Multiple Distributors in GSP Groups, and the process that produces the Settlement Run Equitability Report that is generated after SSR Runs will also need to be changed.

12.1.5 DUoS Report

The DUoS report will require modification to handle multiple Distributors in GSP Groups.

New Distributor version of the DUoS Report

The first part of the report (profiled SPM data) will only process data that relates to the distributor receiving the report; it will only create those SUP, DIS, GP1, VMR, SPX and TOT records required to hold this processed data.

E.g. consider the case where Distributor 'X' and Supplier 'Y' are active in GSP Group 'Z', but for a particular SSR Run none of the SPM files used in the SSR run contain data for this Distributor/Supplier/GSP Group combination. Then in creating the DUoS report for Distributor 'X ' for this SSR Run, the sequence of records

SUP 'Y'
DIS 'X'
GP1 'Z'
:

will not be created since there is no corresponding data to process and output. (Note, however, that if the Desirable Change were to be implemented, it would be possible to implement additional validation in the SSR Run function that would prevent this situation from arising.)

Note that the second part of the Distributor DUoS report (GSP Group Correction Scaling Factor and GSP Group Correction Factor data) will contain data for all suppliers active in the GSP Groups used in the SSR run. For some of these Supplier/GSP Group combinations, the distributor receiving the report may not be an appointed distributor. This additional report data is not specific to a particular supplier and therefore the only commercial information contained will be the full list of suppliers operating in the GSP Group. Since this information is available elsewhere, Logica have taken the view that not altering the report will not breach any confidentially rules. We have also assumed that this will not cause a problem to the distributor's system.

New Supplier version of the DUoS Report

The first part of the report (profiled SPM data) will only process data that relates to the supplier receiving the report; it will only create those SUP, DIS, GP1, VMR, SPX and TOT records required to hold this processed data. The example above could equally well

illustrate the DUoS report for Supplier 'Y'. (Note, however, that if the Desirable Change were to be implemented, it would be possible to implement additional validation in the SSR Run function that would prevent this situation from arising.)

12.1.6 LLFC load mechanism (D0265)

No modification is required to cope with Multiple Distributors in GSP Groups for the loading of D265 files.

12.1.7 Archiving.

Archiving will be modified to correspond with the changes made to the database.

12.1.8 DPP

No changes are required are required to the Daily Profile Production Run.

12.1.9 Performance issues

Assuming that the data levels remained unchanged, the ISRA/SVAA processes will take slightly longer to run as a direct result of this software change, but it is expected that the impact of this will be small. However, as the volume of Line Loss Factor data that is held in the database increases, the SSR Run process may take longer to run. Similarly, loading of individual D0265 files would be expected to take longer, and there may be more of them to load as more Distributors come on line; this may pose problems in loading them within the operational window.

12.1.10 Desirable Requirement 5.5.1 Market Domain Data

Since ISRA/SVAA does not load GSP Group Distributor records from the Market Domain Data file, there is no impact of this requirement on the ISRA/SVAA software.

Under the changes for Mandatory Requirements described above, provision has already been made for modifying ISRA/SVAA to allow this data to be entered via the user interface.

Note, however, that there is an operational impact of this requirement on ISRA/SVAA, since an operational procedure will be needed to load this data into SVAA via the User Interface.

12.1.11 Desirable Requirement 5.7.1 Standing Data

(a) Validating Non Half Hourly Data

It is Logica's current understanding that the desirable requirement can be achieved by adding the SMRA to 'Data Aggregator in GSP Group' entity as an additional key, to indicate which SMRA has certified that GSP / DA / SUP combination. (Note that Logica do not believe it is logically correct to add the SMRA to the 'Supplier in GSP Group' entity, since according to 030AAR, the correct logical entity involves Suppler, its associated agents (ie Data Aggregator for ISRA/SVAA), SMRA and GSP Group.).

Issues arise when we try to reconcile any new validation with the existing functionality added under LCR162, the change to allow 'Automatic Updates of Standing Data'.

Prior to LCR162 it was assumed that the 'Data Aggregator in GSP Group' appointments specified in the standing data were correct, and if the contents of the loaded SPM file were

inconsistent with this standing data then the file was rejected. Now, post LCR162, this assumption is reversed; the philosophy now is that the SPM file is assumed to be correct and when the file is loaded the standing data will automatically be updated and brought into line with the contents of the file. This process can involve inserting extra 'Data Aggregator in GSP Group' (GSP / DA / SUP) combinations into the database for data that is present in the SPM file, but not yet present in the standing data.

If this approach is to be retained so that the contents of the SPM file are still assumed to be correct, then any updates required to the standing data must include the expanded 'Data Aggregator in GSP Group' entities (GSP / DA / SUP / SMRA), for any GSP / DA / SUP combinations exist in the SPM file. A value for the SMRA key can be retrieved from the corresponding row of the SPM file, to fully populate the entity. However, the point of the desirable requirement is that the standing data should validate the contents of the SPM file. If the standing data is updated from the SPM files when they are loaded the desirable requirement will not be met.

Consequently, Logica can only identify two benefits from implementing this change in combination with LCR162. The first is that additional reporting could be performed, about discrepancies between the standing data and the SPM files being loaded. This would be implemented as additional warnings written to the log file produced by the D41 file loader. Secondly, it would be possible in principle to carry out additional validation before carrying out an SSR run, to ensure that the expected data is present for all data aggregator/supplier/distributor/GSP Group combinations for the settlement day. This would require an additional change to the Run SSR form. This has not been included in this impact assessment. Logica do not believe that these enhancements were the intention behind this change, and that these minor benefits would not justify the substantial and complex change that would be required. We will be happy to assess this change if ELEXON require it.

The aim of the desirable requirement is to enforce strict validation of loading SPM files. Taking this to its logical conclusion would involve removing LCR162 from SVAA, so no automatic update of standing data is now performed. This would have an operational impact in that a large number of files which currently load correctly would now fail to load once LCR162 is backed out. Logica assume such a change would not be desired by ELEXON.

(b) Validating Half Hourly Data

To extend the above functionality to HH Data Aggregators, and validation of D0040s, an SMRA field would need to be added to the D0040 flow. The impact of this has not been included in this assessment.

12.2 NHHDA Functional Changes

This section describes changes required to the functionality of NHHDA to implement the change.

NHHDA consists of a number of key components. Each of the components and the impact of P62 is discussed below:

12.2.1 Market Domain Data Loading

Market Domain Data is entered into the NHHDA application by two methods: the D269 flow and the data entry via the front end client interface. At present the application only allows for a single distributor per GSP group for each settlement day. As identified in section 7.7.1 of 030AAR the database, data loading validation and data entry screens will have to be modified to either (i) allow for multiple distributors per GSP group for each settlement day, or (ii) to have validation removed completely. However the effort for both these options, taking account of the testing required, is comparable and hence if requirement 5.5.1 is implemented the change of validation would be the preferred option.

It should be noted that it will not be possible to check that the correct number of distributors are present for each GSP group on each settlement day because ISRA/SVAA has no information on what this number should be. However, it will validate that there is at least one distributor for each GSP group on each settlement day.

12.2.2 Instruction Processing

Instruction processing checks that a metering system has the correct PRS agent and distributor relationship by taking the first two digits of the MPAN, looking up the corresponding distributor in standing data, and validating this against the distributor in the data source (D209 files). This logic does not need to change under P62.

12.2.3 Check Data Collector

The Check Data Collector logic validates the data from PRS agents matches that from Data Collectors. There is no requirement to change any of this logic so this subsystem does not require to be changed.

12.2.4 Aggregation

The format of the current Supplier Purchase Matrix (D41) already contains different entries for different distributors. The SPM is sent based on distributors for each supplier within a GSP group. This part of the software is already able to cope with multiple distributors and requires no change.

12.2.5 Reporting

Report Distributor and Associated Items requires no change as it reports only LLF classes and PRS agent appointments. It does not report on GSP groups.

No other reports need modifying.

12.2.6 Archiving

No change is required to the archiving sub system.

12.2.7 Auditing

No change is required to the auditing sub system.

13 NON-BSC CHANGES

The following section documents the non-BSC changes required to support P62, in particular the changes to the MRA.

An independent set of MRA Change Proposals is being developed in line with "Option 7" as the framework for the baseline design [RD/6], as endorsed by the MRA Executive Committee (MEC) at their meeting on 29 January 2002. The DBFG are progressing these changes in parallel with the P62. However, the nature of the changes means that the draft proposals will not be available within the timeframe of the P62 Assessment Procedure.

The identified MRA changes required to support P62 are as follows:

- add an obligation for the new licensed distributors to provide or procure an SMRS service, this is required as Condition 37 may not apply to non-PDSO distributors;
- recognise non-PES licensed distributors as providers of SMRS services;
- recognise that a new licensed distributor need to be subject to entry process / accreditation and re-qualification in line with the requirements for Supplier entry;
- recognise that a distributor needs to start / stop trading within a particular GSP Group;

The Data Transfer Service Agreement (DTSA) may also need to be amended to recognise non-PDSO licensed distributors as users of data transfer services[19];

The above changes represent a subset of the overall set of changes associated with the introduction of new licensed distributors. The reader needs to be aware that other changes, which do not impact the BSC, will be addressed independently by the DBFG, covering areas, such as:

- MRA funding and representation;
- use of system and connection agreements between host and embedded distributors;
- charging mechanisms for SMRS and the services an SMRS is obliged to provide and those local to the Distribution Business;
- enhancements to those business functions, such as creating and recording skeleton MPAN, that will now potentially be split between different organisations;
- arrangements to construct a single LLF which can represent the underlying components applicable to each distributor;
- arrangements for DUoS charging and in particular how the two distributors would to derive a component to represent transportation across the host distribution network, as the SVAA produced volume will be reported for the relationship between the Supplier and the embedded distribution network;
- requirements for inter-distribution network metering in support of DUoS charging. This is also the subject of P70, however, irrespective of whether such a meter is recorded in CMRS, the DBFG believe there is a business issue to be addressed;

[19] Initial indications suggest it is possible to provide the DTS to participants in the competitive electricity market and that this includes new LDSO and SMRA

ANNEX A – DRAFT BSC CHANGES

Attached as separate document.

Draft legal text is being provided as part of the Requirement Specification to give an indication of the proposed level of change to the BSC. The legal text will continue to be developed during the rest of the Assessment Procedure and issued for review as part of the Report Phase.

ANNEX B - DBFG REQUIREMENTS

The following requirements are taken from the DBFG Requirements Specification [RD/1]. The columns for the source of the requirements and comments are not included. Those columns where the status has changed since [RD/1] was last issued are shaded.

Req	Status	Description
5.1.1	M	Each Licensed Distributor must ensure skeleton MPAN details are entered in MPAS for the entry and exit points on his network(s), in accordance with existing procedures (e.g. BSCP501). The first two digits of each MPAN must be a two-digit Distributor Short Code, uniquely identifying the Distributor.
5.1.2	M	Each Licensed Distributor must provide or procure a single Metering Point Administration Service in which all the entry and exit points on his network(s) are registered.
5.1.3	M	Each Distributor's MPAS must be identified by the same four character Market Participant Id as the Distributor itself.
5.1.4	M	When recording skeleton MPAN details, each Licensed Distributor must attach the metering system to the GSP Group corresponding to the PDSO distribution services area in which it is located.
5.1.5	M	Each Licensed Distributor must publish details of the Line Loss Factor Classes (LLFC) it supports. When recording skeleton MPAN details, the Licensed Distributor must attach each metering system to an appropriate Line Loss Factor Class.
5.1.6	M	Each Licensed Distributor must publish details of the Meter Timeswitch Codes supported on their networks (and by their SMRA service). Suppliers must register each metering system to one of these supported MTC.
5.1.7	M	Each Licensed Distributor must facilitate transfers of metering systems between SMRA and the Central Meter Registration Service (CMRS), in accordance with BSCP68.
5.1.8	M	Each Licensed Distributor must facilitate Dual Supplier Trading, in accordance with BSCP550.
5.2.1	M	DB Accreditation will be required to demonstrate that they can fulfil their MRA obligations. The SMRS used by each Distributor should be accredited and complete an entry process prior to use.
5.2.2	M[20]	Each combination of Supplier Hub (i.e. Supplier and associated Agents) and SMRA should go through an ELEXON entry process prior to use.
5.3.1	M	Each Licensed Distributor must submit Line Loss Factors (for each LLFC) to the Panel, in accordance with BSCP528 and BSCP28 for CRA, where applicable.
5.4.1	M	Each Licensed Distributor must maintain details of unmetered supplies on their network(s).
5.5.1	M[21]	Market Domain Data should include details of which Distributors (and associated MPAS) are operating in each GSP Group.
5.6.1	M	Where the existing legal framework specifies that Distributors are to receive reports (e.g. NHH DUoS data from SVAA), these reports must show only metering systems on the network(s) of that Licensed Distributor.
5.6.2	D[22]	Distributors should be able to register in the Central Meter Registration Service (CMRS) the metering at the connection point between two Distribution Systems (even when those systems are in the same GSP Group).
5.7.1	Not Required[23]	SVAA should validate that files received from Data Aggregators only contain data from those SMRA which have been through a Supplier entry process with that Data Aggregator and Supplier.
5.8.1	H	Metering of a suitable standard, i.e HH capable, should be installed at, and data collected from, the connection point between the Host and Licensed- Embedded DBs

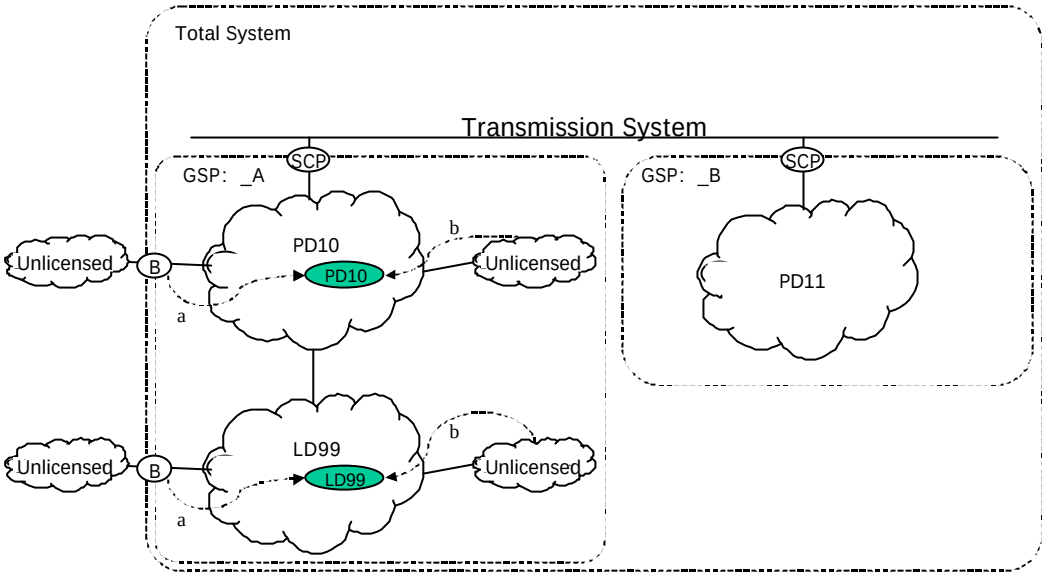
[20] In the original requirements specification this was Highly Desirable, however, the VAMG determined this was mandatory within the scope of P62.
[21] In the original requirements specification this was Desirable, however, the VAMG determined this was mandatory within P62 as it is required to allow SMRS to validate PC/SCC combinations
[22] This is outside the scope of P62 and is raised independently as P70
[23] In this original requirements specification this was Desirable, however, the VAMG agreed with the SVAA impact assessment that this would conflict with SIR R2180 (Impact of Inaccurate Standing Data on Stage 2 Settlement).

ANNEX C - ADVANCED NETWORK CONFIGURATIONS

Unlicensed Distribution Networks

Figure C.1 shows an extension of the original figure 3.1 and how a new licensed distributor can also support unlicensed distribution networks.

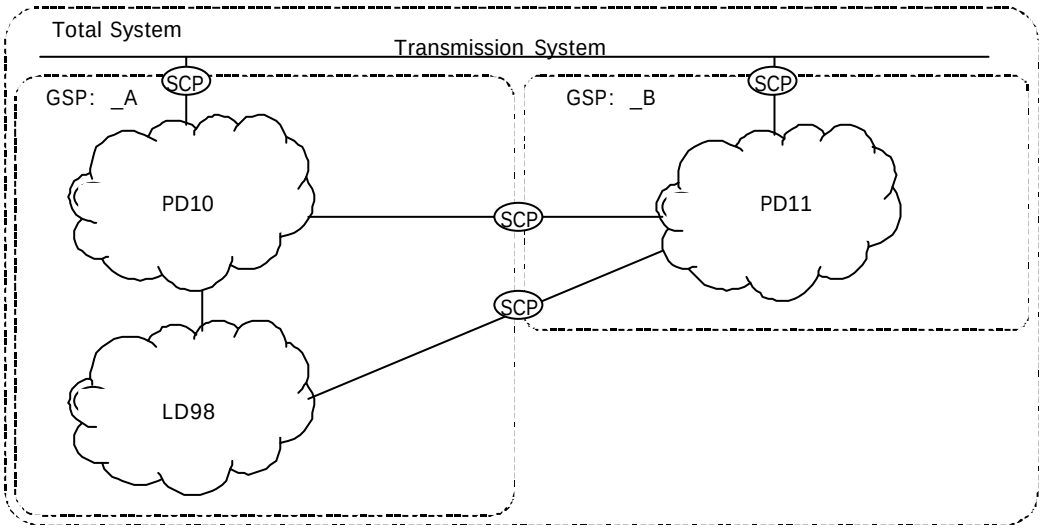
Figure C.1 – P62 treatment of unlicensed distribution networks



Inter GSP Group Connections

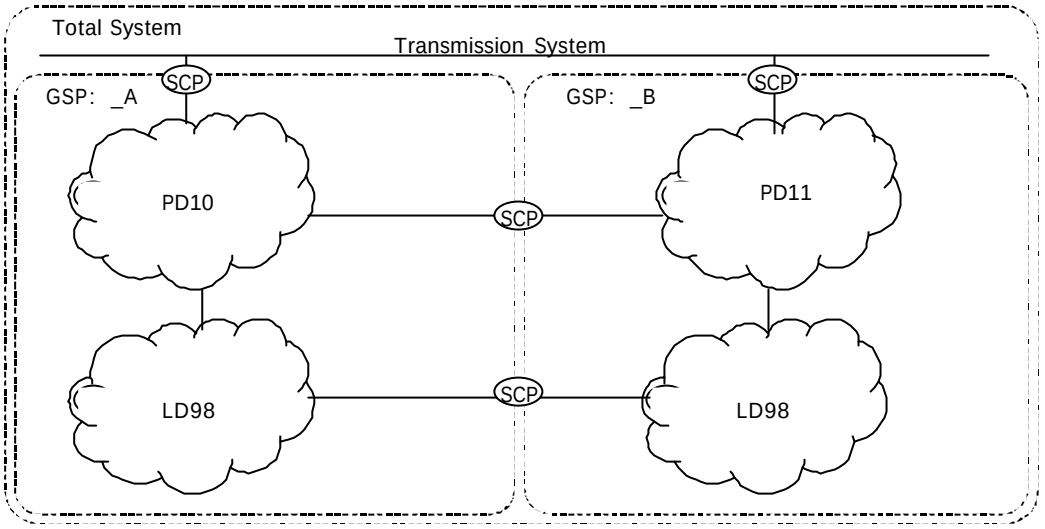
Each Distribution System must be associated with one and only one GSP Group. Without this restriction it is not possible to correctly determine the GSP Group Take. Where a physical distribution network has links to two GSP Groups, then a System Connection Point meter is required. This can be configured as shown in Figure C.2, where all assets are in GSP Group _A.

Figure C.2 – Inter GSP Group Connection – Single Network



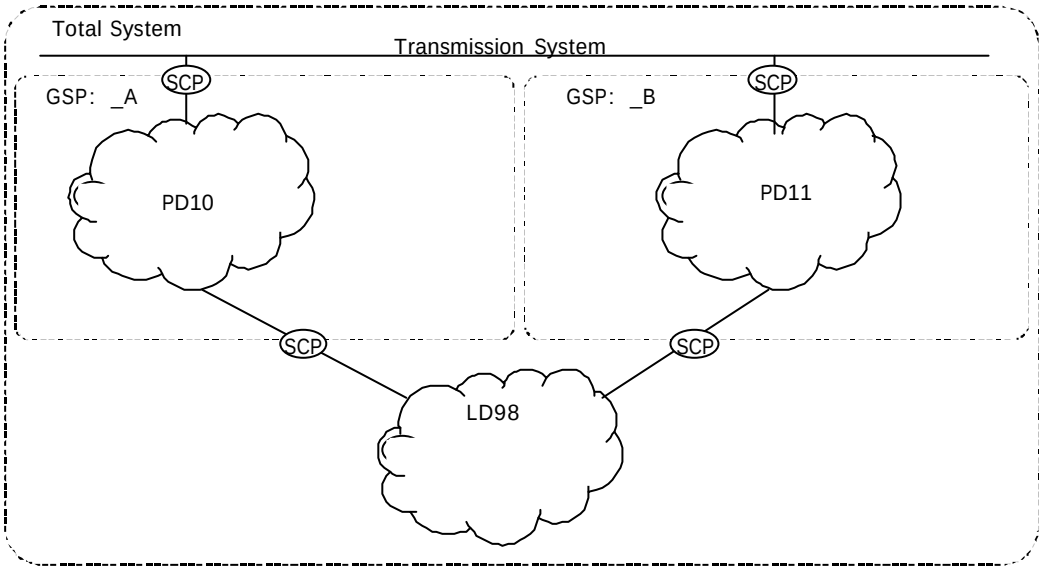
Alternatively if there was a reason for some assets to be in the other GSP Group, then the physical distribution network would need to be split into two Distribution Systems with a System Connection Point meter between the two. Each MPAN would be registered against the GSP Group in which it physically resides (i.e. in relation to the location of the SCP meter).

Figure C.3 – Inter GSP Group Connection – Split Network



Finally it is not possible to configure the network shown in Figure C.4, as the new Distribution System would be outside both GSP Groups.

Figure C.4 – Inter GSP Group Connection – Unsupported



ANNEX D – CONSULTATION QUESTIONS

Respondent:		
Representing (please list all parties):		
Question		Response
Q1	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.	**Yes / No**
Rationale:		
Q2	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.	**Yes / No**
Rationale:		
Q3	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.	**Yes / No**
Rationale:		
Q4	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	**Yes / No**
Rationale:		
Do you have any further comments on Modification Proposal P62?		

ANNEX E – IMPACT ASSESSMENT QUESTIONS

It is an important aspect of the assessment of P62 to obtain the costs directly attributable to Modification Proposal P62 (i.e. Question 1). However, the VAMG also recognise that P62 only represents a subset of the overall effort required to change some systems to support new licensed distributors. As a result Question 2 has been included. The VAMG recognise that some of this work is ongoing, including some of the important commercial aspects of operating new licensed Distribution Systems, however, the VAMG would appreciate any information on the expected level of overall cost that can be provided.

Respondent:	
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	
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.	
Q3 - How much notification would you require to implement P62?	
Q4 - Does the Modification give rise to any implementation issues within your organisation? (if so please give details)	
Q5 - Do you have any further views.	

