ASSESSMENT REPORT for Modification Proposal P213 'Facilitating microgeneration (Optional Single MPAN)'

Prepared by: P213 Modification Group

Date of Issue:	9 August 2007	**Document Reference:**	P213AR
Reason for Issue:	For Use	**Version Number:**	1.0

This document has been distributed in accordance with Section F2.1.10 of the Balancing and Settlement Code.[1]

Proposed Modification P213 seeks to amend the current provisions for Non Half Hourly (NHH) microgeneration[2] to allow a single MPAN[3] to be used for both Import and Export in Non Half Hourly Settlement. The aim of this modification is to reduce the associated industry costs and the complexity of Settlement processes for Suppliers and Supplier Agents, and thereby facilitate increased Settlement of microgeneration Export. Under the Proposed Modification, different Line Loss Factor Classes (LLFCs) could be assigned to the Import and Export for an Import/Export MPAN.

Alternative Modification P213 seeks to implement the Proposed P213 Modification as the only method for the NHH settlement of microgeneration Export. The current two NHH MPAN solution introduced by P081 would be removed and participants would be required to register NHH Import and Export together under one MPAN. As for the Proposed Modification, this Alternative does not seek to remove the option of not settling microgeneration Export, or using a Half Hourly (HH) meter to settle Export. This Alternative Modification seeks to remove the complexity of the Settlement processes for MPANs moving between the P081 and P213 solutions.

MODIFICATION GROUP'S RECOMMENDATIONS

The P213 Modification Group invites the Panel to:

- **AGREE a provisional recommendation that Proposed Modification P213 should not be made;**
- **AGREE a provisional recommendation that Alternative Modification P213 should not be made;**
- **AGREE a provisional Implementation Date for Proposed Modification P213 of 05 November 2009 if an Authority decision is received on or before 05 May 2008.**
- **AGREE a provisional Implementation Date for Alternative Modification P213 of 05 November 2009 if an Authority decision is received on or before 05 May 2008.**
- **AGREE the draft legal text for Proposed Modification P213;**
- **AGREE the draft legal text for Alternative Modification P213;**
- **AGREE that Modification Proposal P213 be submitted to the Report Phase; and**
- **AGREE that the P213 draft Modification Report be issued for consultation and submitted to the Panel for consideration at its meeting of 13 September 2007.**

[1] The current version of the Code can be found at http://www.elexon.co.uk/bscrelateddocs/BSC/default.aspx.
[2] The BSC Panel have set the capacity limit for settling generation using Non Half Hourly Meter readings to 30 kW.
[3] MPAN (Metering Point Administration Number) is the term referred to in the Master Registration Agreement (MRA), which identifies a SVA Metering System and Metering System Identifier, or MSID which is the term used under the BSC. For consistency with the term used in P213, this document shall use the term MPAN.

CONTENTS TABLE

SUMMARY OF IMPACTED PARTIES AND DOCUMENTS

As far as the Modification Group has been able to assess, the following parties/documents would be impacted by P213.

Please note that this table represents a summary of the full impact assessment results contained in Appendix 4.

Parties		Sections of the BSC		Code Subsidiary Documents	
Distribution System Operators	☒	A	☐	BSC Procedures	☒
Generators	☐	B	☐	Codes of Practice	☐
Interconnectors	☐	C	☐	BSC Service Descriptions	☒
Licence Exemptable Generators	☐	D	☐	Party Service Lines	☐
Non-Physical Traders	☐	E	☐	Data Catalogues	☒
Suppliers	☒	F	☐	Communication Requirements Documents	☐
Transmission Company	☐	G	☐	Reporting Catalogue	☒
Party Agents		H	☐	**Core Industry Documents**	
Data Aggregators	☒	I	☐	Ancillary Services Agreement	☐
Data Collectors	☒	J	☐	British Grid Systems Agreement	☐
Meter Administrators	☐	K	☐	Data Transfer Services Agreement	☐
Meter Operator Agents	☒	L	☐	Distribution Code	☐
ECVNA	☐	M	☐	Distribution Connection and Use of System Agreement	☐
MVRNA	☐	N	☐	Grid Code	☐
BSC Agents		O	☐	Master Registration Agreement	☒
SAA	☐	P	☐	Supplemental Agreements	☐
FAA	☐	Q	☐	Use of Interconnector Agreement	☐
BMRA	☐	R	☐	**BSCCo**	
ECVAA	☐	S	☒	Internal Working Procedures	☐
CDCA	☐	T	☐	**BSC Panel/Panel Committees**	
TAA	☐	U	☐	Working Practices	☐
CRA	☐	V	☐	**Other**	
SVAA	☒	W	☐	Market Index Data Provider	☐
Teleswitch Agent	☐	X	☐	Market Index Definition Statement	☐
BSC Auditor	☐			System Operator-Transmission Owner Code	☐
Profile Administrator	☐			Transmission Licence	☐
Certification Agent	☐				
Other Agents					
Supplier Meter Registration Agent	☒				
Unmetered Supplies Operator	☐				
Data Transfer Service Provider	☐				

1 EXECUTIVE SUMMARY

The key conclusions of the P213 Modification Group ('the Group') are outlined below.

The Group:

- **AGREED** by majority that the Proposed Modification would not better facilitate the achievement of Applicable BSC Objectives (c) and (d)[4] due to the complexity of the processes required to operate it.
- **AGREED** a solution for the Proposed Modification whereby a single MPAN can be used for both Import and Export for Non Half Hourly (NHH) microgeneration sites. With the current level of Settlement accuracy being maintained as well as the flexibility to have different LLFCs on the Import and Export registers;
- **AGREED** that an Alternative Modification should be developed to introduce the concept that P213 could be the only solution allowed for NHH Export/Import (i.e. remove the current solution introduced by P081). This would reduce the complexity of the Settlement processes needed for NHH Export Settlement processes (e.g. Change of Supplier) and would mean NHH Import and Export must be recorded on a single MPAN;
- **AGREED** by majority that the Alternative Modification would better facilitate the achievement of Applicable BSC Objectives (c) and (d), when compared to the Proposed Modification by reducing the level of risk and complexity of the Settlement processes for NHH Export and hence making it more efficient;
- **AGREED** by majority that the Alternative Modification would not better facilitate the achievement of Applicable BSC Objectives (c) and (d) due to the expense of the solution and the removal of the ability for customers to choose different Suppliers for NHH Import and Export;
- **AGREED** an Implementation Date for the Proposed and Alternative Modifications of 05 November 2009;
- **AGREED** that the draft legal text delivers the intended solution for the Proposed/Alternative Modification; and
- **NOTED** that the implementation costs for Central Systems for the Proposed and Alternative Modifications were estimated to be £369,000 (±20%).

A description of the P213 solution is provided in Section 2. Further information regarding the Group's discussions of the areas set out in the P213 Terms of Reference is contained in Section 3, including details of the Group's recommended implementation approach and the estimated implementation costs/perceived cost-benefits of P213.

A summary of the Group's views regarding the merits of the Proposed Modification and Alternative Modification can be found in Section 4. A copy of the Group's full Terms of Reference can be found in Appendix 2, whilst a summary of the responses to the Assessment Procedure consultations and impact assessment can be found in Appendices 6, 7 and 5 respectively.

2 DESCRIPTION OF MODIFICATION

This section outlines the solution for the Proposed Modification and Alternative Modification, as developed by the Modification Group.

[4] (c) Promoting effective competition in the generation and supply of electricity, and (so far as consistent therewith) promoting such competition in the sale and purchase of electricity;
(d) Promoting efficiency in the implementation and administration of the balancing and settlement arrangements.

For a full description of the original Modification Proposal as submitted by E.ON UK ('the Proposer'), please refer to the P213 Initial Written Assessment (IWA).

2.1 Proposed Modification

2.1.1 Use of a Single MPAN

P213 was raised on 27 April 2007 by E.ON UK ('the Proposer'). P213 seeks to remove the requirement to have two separate MPANs for NHH Import/Export sites, and to allow (where requested) NHH Import and NHH Export to be registered to a single MPAN. The intention of P213 is to reduce the complexity and cost of the associated industry processes and, in doing so, facilitate increased Settlement of microgeneration Export.

In practice this would mean that, for an existing MPAN, where a Supplier wishes to add microgeneration Export, the Supplier would not need to request an additional MPAN. Instead the Supplier would reconfigure the Metering System, and assign an Import/Export SSC (to replace the existing, Import only SSC). This reconfiguration request would trigger the Non Half Hourly Meter Operator Agent (NHHMOA) and Non Half Hourly Data Collector (NHHDC) to install Import/Export metering and collect meter readings as appropriate.

No change is proposed to the current physical metering requirements for these sites or the current requirement to measure Import and Export separately (on different registers). The Proposed Modification is intended to be an alternative option to (rather than replacing) the current processes introduced by P081 'Removal of the Requirement for Half Hourly Metering on Third Party Generators at Domestic Premises'.

2.1.2 Settlement Accuracy

In addition, P213 proposes that changes are made to the Settlement arrangements to ensure that profiling (and thereby Settlement), maintains the current level of accuracy for these Import/Export MPANs. This would be achieved by applying the current profile shapes (used for Import and Export MPANs) to joint Import/Export MPANs.

P213 notes that extending the profiling arrangements to single MPAN customers in this way would require profiles to be used in a different way to currently, in that:

- It would require profile coefficients from different Profile Classes to be assigned to different registers of the same Metering System. Currently Settlement always applies a single Profile Class (i.e. the one registered in SMRS) to all the registers of a Metering System; and
- It would require Settlement to attribute energy to both registers of a Metering System simultaneously. Currently the profiling rules are written on the premise that only a single register will be 'on' (i.e. recording the flow of energy) at a given point in time.

P213 proposes a mechanism for achieving this, which minimises the impact of P213 on Supplier Agents. The key features of this solution are as follows:

- The Import/Export MPAN would be registered in Supplier Meter Registration Service (SMRS) to the Import Profile Class (and a new special-purpose Import/Export SSC)
- Non Half Hourly Data Collector (NHHDC) and Non Half Hourly Data Aggregator (NHHDA) systems would treat this Import/Export SSC in the same way as other two-register SSCs.
- Supplier Volume Allocation Agent (SVAA) would not attempt to apply the normal profiling rules to Import/Export SSCs (as these profiling rules are not designed to handle two registers recording energy simultaneously). Instead, SVAA would refer to a 'Substitution Table' which would refer to the correct profile coefficients to be used for each register. This Substitution Table would instruct SVAA to use a normal demand profile for the Import register, and a P081 Export profile for the Export register. The Substitution Table would be approved by the Panel in advance in accordance with existing rules for the approval of new SSCs.

2.2 Proposed Modification – Central Systems Detail

2.2.1 SVAA

P213 requires that MPANs registered as Import/Export are treated differently by the SVAA, to ensure that the same level of profile and Settlement accuracy is maintained for Import/Export MPANs (when compared to current Export and Import MPANs). P213 therefore looks to apply the current profile shapes to microgenerators with a single MPAN, as well as those with two MPANs.

2.2.1.1 System Constraints

In effect, this Modification Proposal is seeking to waive (for microgeneration customers) two constraints that are built into the design of the SVA market:

- that each SVA Metering System is assigned to a single Profile Class (built into SMRS and Supplier Agent systems); and
- that only one of the Time Pattern Regimes (TPRs) associated with a given SSC can be recording energy at a given instant in time (contained within the profiling component of SVAA).

2.2.1.2 Changes to Overcome these Constraints for P213 Import/Export MPANs

Rather than directly change these requirements (which is considered to be a significant change and therefore costly) P213 proposes that Annex S-2 of the BSC is amended to state that:

- The normal provisions for calculation of profile coefficients (i.e. sections 6.2 to 6.8 of Annex S-2) shall not apply to SSCs that include both Import and Export registers; and
- Instead, for these Import/Export SSCs, the profile coefficients for each TPR will be set equal to the profile coefficients that would have been used (in the opinion of the BSC Panel), had the Import and Export been assigned to two MPANs rather than one. In practice, this will be achieved by providing the SVAA system with a 'Substitution Table' detailing which profile coefficients to use for each TPR.
- The Substitution Table will be generated by SVAA and held within SVAA systems. When new Import /Export SSCs are defined, ELEXON will provide (after Panel approval) the values to be used for that SSC within the Substitution Table to SVAA.

The changes to systems and processes required to achieve this can be summarised as follows:

- Amendments are required to the profiling component of the SVAA system, so that profile coefficients for Import/Export SSCs are selected by reference to the Substitution Table. This requires a new value of the SSC Type flag to identify Import/Export SSCs. These changes are described in Appendix 4; and
- A process is required for providing the Substitution Table data to SVAA. The MDD data flows that will be used to send this information are the D0269 and D0270. This additional data would be provided to all participants to aid transparency, but would potentially impact all participant systems receiving the flows; and
- The meter reading processing carried out by NHHDCs should remain unchanged, with Import/Export Metering Systems handled in a similar way to any other multi-register Metering Systems. No changes are envisaged to the EAC/AA calculator (which will, in effect, use the Substitution Table data) used by the NHHDC or the NHHDA software; and
- All of the TPRs associated with a given SSC must have switching times defined in local time (i.e. GMT Indicator='N') or GMT (i.e. GMT Indicator='Y'). These cannot be mixed; and
- All of the TPRs associated with an SSC must be in the same Teleswitch Group as that SSC (or no Teleswitch Group, if the SSC is in no Teleswitch Group). This prevents teleswitched and non-teleswitched TPRs being combined into a single SSC.

2.2.2 MDD Data Flows

The data used by SVAA in the Substitution Table will be included in MDD data flows to provide a secure and tested method of updating the Substitution Table data. The publication of the Substitution Table data (via the MDD data flows) also seeks to provide transparency of the information used by SVAA.

Version 3 of D0269 'Market Domain Data Complete Set' and D0270 'Market Domain Data Incremental Set' data flows will be updated to include the SVAA Substitution Table information. It is noted that version 2 of the D0269 and D0270 will not be updated.

2.2.3 Market Domain Data Management

The data used in the Substitution Table would also be included in MDDM. MDDM software (and MDD data flows) would need to be updated (as described above in changes 1-3) to:

1. allow a third value of SSC Type (e.g. 'X'), for use with Import/Export SSCs;
2. allow the Export/Import flag to be assigned at a register level for type 'X' meters ; and
3. create a new table to hold the Substitution Table used by SVAA.

2.2.4 Line Loss Factor Classes

The Group agreed that LLFCs should also be included in the Substitution Table. This will allow the separate Import and Export LLFCs to be applied to the Import and Export on an Import/Export MPAN respectively. The Import LLFC would still be registered against the MPAN in SMRS as for any normal Import MPAN. This will be achieved by:

- including the additional Export LLFCs in the SVAA Substitution Table (with the Export Profile Class, etc). These values would then be used by SVAA in their calculations and would be updated, as with the other data items included in the table, via MDD.
- the substituted Profile Class, SSC and LLFC would also be reported on the D0030 'Non Half Hourly DUoS Report' and the D0082 'Supplier Purchase Matrix Report'. This would mean data shown on these reports is the same, irrespective of whether the Supplier chooses to settle NHH Export using separate MPANs for Import and Export or a single Import/Export MPAN and will aid Suppliers in reconciling their DUoS bills.

2.2.5 Further Detail

Appendix 4 ('Changes to SVAA and Market Domain Data Management (MDDM) Software') describes in more detail the changes required to the SVAA and MDDM software.

2.3 Proposed Modification – Party and Party Agent Detail

2.3.1 SMRS

Under the current BSC rules (P081 solution), the micro-generation customer would have two MPANs registered in SMRS, with associated data items as follows:

P81	Import MPAN	Export MPAN
Profile Class	1	8
LLFC	Import LLFC selected by Distributor	Export LLFC selected by Distributor
SSC	0393	0482

Under P213 (Proposed or Alternative) the micro-generation customer would have a single MPAN registered as follows:

P213	Import/Export MPAN
Profile Class	1
LLFC	Import LLFC selected by Distributor
SSC	0666

Although, SMRS will not include details of the SVAA Substitution Table, the SMRA could receive these details via the D0269 (v3) 'Market Domain Data Complete Set' and the D0270 (v3) 'Market Domain Data Incremental Set' data flows.

2.3.2 Supplier Agents

2.3.2.1 NHH Meter Operator Agent

The Meter Operator will be aware that the MPAN is Import/Export through looking at the Meter Technical Details (via the Measurement Quantity Id), where each register will be recorded as Import or Export.

Meter Operator Agents would be able to receive the full set of Substitution Table data via the D0269 (v3) 'Market Domain Data Complete Set' and the D0270 (v3) 'Market Domain Data Incremental Set' data flows.

This Modification seeks to facilitate the use of either two separate meters (one for Export and another for Import) or a single meter (for both Import and Export) under the single MPAN solution.

2.3.2.2 NHH Data Collection and NHH Data Aggregation Agents

Under P213 (Proposed or Alternative), the data collection and data aggregation processes remain largely unchanged. Meter reads will be collected as normal, with both the Import and the Export registers being read at the same time. The physical meter advances are assigned to the correct Time Pattern Regimes, and converted to Annualised Advances using the Daily Profile Coefficient data provided by SVAA for the appropriate GSP Group, Profile Class, Standard Settlement Configuration and Time Pattern Regime. These Annualised Advances are then passed to the NHHDA, who uses them to construct the cells of the Supplier Purchase Matrix (SPM) in exactly the same way as for any other MPAN. No change is proposed to the NHHDA or EAC/AA systems (or the software provided by ELEXON to these agents).

In all cases, the SPM cell provided to SVAA will reflect the Metering System details registered in SMRS.

The information included in the SVAA Substitution Table will be included in the D0269 v3 and D0270 v3 data flows. It is noted that NHHDA currently receives v2 of these flows. It is not proposed that this would be updated, as NHHDAs will not need the additional data provided in the Substitution Table.

2.3.3 Suppliers

As P213 Proposed Modification is an optional single MPAN solution, in addition to the existing two MPAN solution under P081, it does not require Suppliers to convert current microgeneration sites that are using the existing P081 arrangements, or to set up all new microgeneration sites under the P213 arrangements (as they may continue to use the current arrangements). However, through the Change of Supplier Process, Suppliers may find that they have an Import/Export MPAN. Therefore, P213 requires that Suppliers are able to accommodate this scenario. It is noted that a Supplier may choose to convert a single MPAN microgeneration site to a two MPAN microgeneration site, once they have taken the MPAN on, or choose not to settle the Export.

The information included in the SVAA Substitution Table will be included in the D0269 v3 and D0270 v3 data flows.

2.3.4 Licensed Distribution System Operators (LDSOs)

P213 requires that LDSOs are able to manage Import/Export MPANs within their systems. The information included in the SVAA Substitution Table will be included in the D0269 v3 and D0270 v3 data flows.

The proposed solution would allow LDSOs to use different LLFCs for Import and Export on a single MPAN (through the use of the Substitution Table, with the Import LLFC assigned to the MPAN in SMRS and the Export LLFC included in the Substitution Table), and ensures that the correct values are included in the D0030 'Non Half Hourly DUoS Report'. More detail on how different LLFCs could be applied is included in section 2.2.4.

2.4 Proposed Modification – New Processes Detail

P213 will require several new processes to describe how registration, Change of Supplier and disconnection will work for Import/Export MPANs in a variety of different likely scenarios (e.g. a change from a two MPAN solution (P081) to a single MPAN (P213) solution with Change of Supplier).

A list of these new processes is included below, together with an estimate of the level of additional complexity associated with the new process (the P081 two MPAN solution for microgeneration is taken as the baseline for this comparison). Further details of the likely scenarios for each of the processes for Registration and Change of Supplier described below are included in Appendix 3. Each of the processes described in the below table will be set out in the relevant BSCP.

New P213 Process	Level of Additional Complexity
Registration of an Import/Export MPAN	
An existing Supplier wishes to use a single MPAN for Import and Export on a site with 2 separate MPANs (one for Export and another for Import)	MEDIUM
The existing Supplier adds Export to an Import only site	MEDIUM
The existing Supplier discontinues the Settlement of Microgeneration Export	MEDIUM
Processes for Change of Supplier	
Change of Supplier Process (Import and Export from 2 MPANs to 1 MPAN)	HIGH
Change of Supplier Process (Import and Export from 1 MPAN to 2 MPANs)	HIGH
Change of Supplier Process (new Supplier takes on Import or Export only where Import and Export both registered)	HIGH
Change of Supplier Process (for an Import only site, which is being converted to Import/Export)	MEDIUM
Change of Supplier Process (for an Import/Export site, which is being converted to Import)	MEDIUM
Population of Substitution Table data	
When new Import/Export SSCs are approved, ELEXON will confirm the Substitution Table data to be used by SVAA for that SSC (following Panel approval)	LOW

2.5 Alternative Modification

An Alternative Modification has been considered by the Group. The Alternative Modification is the same as the Proposed Modification solution except that, under the Alternative, the two MPAN option (brought in by P081) would no longer be available to Parties for settling Non Half Hourly Export; so the P213 process would be the only arrangement available to Parties to settle Non Half Hourly Export. A Party could, however, use a Half Hourly Metering solution to settle the Export separately, or choose not to settle the Export at all.

The Group noted that the Alternative would also require a one-off migration exercise for those sites which are currently registered in Settlement under a separate Export MPAN. The number of MPANs to be migrated is dependent on the take up of the existing 2 MPAN solution prior to the implementation of P213. Currently only 25 MPANs are registered in settlement as Non Half Hourly Export (see section 3.11.8.1).

3 AREAS RAISED BY THE TERMS OF REFERENCE

This section outlines the conclusions of the Modification Group regarding the areas set out in the P213 Terms of Reference.

3.1 Master Registration Agreement (MRA) Interaction

3.1.1 Modification Group's Discussions

The Group noted that P213 highlights that an amendment to Schedule 8 of the MRA is required to give effect to the changes suggested in the Modification Proposal. Any changes needed to the MRA, to allow the use of a single MPAN would be processed through the normal MRA change process. A revision may also be required to Part 1 of the MRA to amend the principles and definitions of Metering to reflect the single MPAN arrangements proposed in P213.

Changes to the Data Transfer Catalogue (DTC) will be required to update the MDD data flows (D0269 and D0270).

E.ON UK has stated that they would raise a change to the MRA should P213 be approved.

3.1.2 Modification Group's Final Conclusions

3.1.2.1 Proposed Modification

The Group noted that, for the Proposed Modification, the changes to the MRA as described above, in section 3.1.1 are needed before the P213 process can be used by participants; however, it would be inadvisable to implement the MRA changes prior to the Implementation of P213, as settlement accuracy would be impacted (as the SVAA Substitution Table would not be ready for use). Therefore it would be possible for changes to the MRA to occur any day following the Implementation of P213, although the Group agreed that it would be most efficient to implement changes to the MRA at the same time as P213.

Changes to the DTC (as described in section 3.1.1) would also need to be implemented at the same time as P213.

3.1.2.2 Alternative Modification

The Group noted that, for the Alternative Modification, changes to the MRA and DTC as described above, (in section 3.1.1) would need to be implemented at the same time as the P213 process, because the existing (P081) arrangements will be removed by the Alternative.

The Modification Group noted that Suppliers will not be able to utilise the Alternative Solution without the equivalent changes to the MRA. It is noted that if this Modification (P213 Alternative) were to made without a change to the MRA then the MRA and BSC would be inconsistent; and participants would be non compliant with either the MRA or BSC by settling NHH Export and Import on a single MPAN or 2 MPANs (respectively).

BSC Systems would, however, be technically capable of successfully processing both Import/Export MPANs and separate Import and Export MPANs.

3.2 Further Changes not described in the Modification Proposal

3.2.1 Publishing the Substitution Table Information

3.2.1.1 Modification Group's Initial Discussions

The Group proposed three options for the extent to which the Substitution Table would be published to industry, differing in the level of transparency, and the impact on participant systems:

(a) Substitution Table used by SVAA only – for this option, the Substitution Table would be used by the SVAA only and would not be provided for use by any other participant. Profile coefficients reported by SVAA would be constructed using the substitution table, but the Substitution Table data used to construct them would not (except perhaps through the paper and minutes of the Panel Committee that approved the data).
This option would only require minimal changes to MDDM. The advantage of this approach is that it minimises the impact on participant systems, but there is reduced transparency.

(b) MDD data flows include the Substitution Table information – for this option, the data used in the Substitution Table would be included in MDDM (and MDD data flows received by participants). This would increase the visibility of the data applied. MDDM software and MDD data flows would need be updated to allow:

1. allow a third value of SSC Type (e.g. 'X'), for use with Import/Export SSCs;
2. allow the Export/Import flag to be assigned at a register level for type 'X' meters ; and
3. create a new table to hold the Substitution Table used by SVAA.

There are 3 possible options for the MDD data flow(s) that could be used to send this information. These form subcategories for option (b) and are:

i. D0269 and D0270 – additional data would be provided to all participants to ensure transparency, but would potentially impact all participant systems receiving the flows;
ii. D0280 - additional data would be provided to Suppliers to aid transparency, but would potentially impact all Supplier systems receiving the flows; or
iii. a new MDD data flow created specifically for this purpose. This would help ensure that only those participant types who need the data are impacted.

(c) Data published on the BSCCo website (rather than included in MDD) – this option is intended to provide transparency (so that the values applied in SVAA are visible) while reducing the impact on participants systems. Data would not be provided in MDD; however, it would be available to view on the BSCCO website if required.

3.2.1.2 Views of Respondents to the First Assessment Procedure Consultation and Impact Assessment

Those participants who responded to this particular aspect of the Proposed Modification noted an increased impact if option '(b)' was chosen.

A preference for option (b) was highlighted by one participant, to 'keep MDD as the single master of SSC data and ensure transparency'.

3.2.1.3 Modification Group's Further Discussions

The Group considered the Initial Consultation Responses (Appendix 6) and Impact Assessment (Appendices 5 and 9) and noted the comments on the options for solutions. It was noted that the BSC Agent and Central System costs were relatively similar for the various options. The Group felt strongly that the publication of the data Substitution Tables was required, to allow for full transparency of the information used by SVAA. The Group also felt that creating a new flow should be avoided if possible, due to the increased impact on parties and their agents.

The Group concluded that publication within the D0269 and D0270 was the most appropriate solution to ensure all participants would receive the data as part of the MDD set, using the established data transfer mechanisms. A number of respondents to the initial Impact Assessment noted the impact on their systems if a change to the D0269/D0270 was made. There were a number of responses indicating that an implementation time of six months to a year would be required, one respondent indicated eighteen months would be needed.

The Group agreed that option '(b)i' should form the basis of the Proposed Modification. The Group also noted that there are currently 2 versions of the D0269 and D0270 MDD data flows in use (version 2 and version 3). The Group used the second assessment procedure consultation to gain views on which should be updated.

3.2.1.4 Views of Respondents to the Second Assessment Procedure Consultation

Those who responded to this question indicated that a mixture of version 2 and 3 is used across the industry. Five respondents indicated that they used v3; three responded that they use v2 and six indicated that different parts of their businesses used different versions.

One respondent highlighted that if NHHDA were to change versions this would be a central change as the software is provided by ELEXON.

3.2.1.5 Modification Group's Conclusions

ELEXON confirmed to the Group that NHHDA currently uses v2 of both the D0269 and D0270. The Group agreed that NHHDA would not need to receive the Substitution Table Data and would, therefore not need to be upgraded to use v3 of the MDD data flows.

The Group noted that, the inability of version2 to support microgeneration MPANs may be one of the reasons behind the low take up pf P081.

The Group confirmed that only version 3 of the MDD data flows should be updated, to reduce the impact of P213 on Party Agents who do not wish to manage microgeneration MPANs.

3.2.2 Separate Line Loss Factor Classes (LLFCs) for Import and Export

3.2.2.1 Modification Group's Initial Discussions

Following the first Modification Group meeting, one Group member noted that at the Proposed solution would not allow separate LLFCs to be applied to the Import and Export on Import/Export MPANs. The member noted that although not widely used, this functionality is available on the existing method of settling microgeneration sites, and suggested that it should be maintained, as it was possible for Import and Export LLFs to be different. It should be noted that the Import LLFC would be assigned by the LDSO to the Import/Export MPAN in SMRS.

The Group agreed that, for the purposes of the Initial Consultation this functionality should be included in a potential Alternative Modification, and should be achieved by including the Export LLFC in the Substitution Table (in the same way that the Export SSC and Profile Class are). Three options were provided within the Requirements Specification as to how widely the Substitution Table LLFC data should be used:

1. **Multiple LLFCs allowed** – for this option the LLFC would be included in the Substitution Table, and used by the SVAA, but the information would <u>not</u> be passed on to be included in the DUoS or other reporting;
2. **Multiple LLFCs allowed and included in the Distribution Use of System (DUoS) Reports** – LLFCs would be included in the Substitution Table as described above, however, in this case the LLFCs (as applied by SVAA) would be shown in the DUoS reporting (D0030); or

3. **Multiple LLFCs allowed and included in DUoS reports and the D0082 (Supplier) Reporting –** LLFCs would be included in the Substitution Table as described above, however, in this case the LLFCs (as applied by SVAA) would be shown in the D0030 and D0082 reports.

3.2.2.2 Views of Respondents to the First Assessment Procedure Consultation and Impact Assessment

The Central Systems Impact Assessment indicated a total additional cost[5] of £17,244, £52,371 and £60,158 respectively for each of the three options.

One respondent indicated that the requirement for separate LLFCs for Import and Export, would create additional systems impacts.

3.2.2.3 Modification Group's Further Discussions

The Group agreed, following the initial Consultation and Impact Assessment that the inclusion of separate LLFCs (via the Substitution Table), which was described as the potential Alternative Modification should form the Proposed Modification solution itself.

This will allow the separate LLFCs to be applied to the Import and Export on an Import/Export MPAN. This will be achieved by:

- including the additional Export LLFCs in the SVAA Substitution Table (with the Export Profile Class, etc). These values would then be used by SVAA in their calculations and would be updated, as with the other data items included in the table, via MDD; and
- the substituted Profile Class, SSC and LLFC would also be reported on the D0030 'Non Half Hourly DUoS Report' and the D0082 'Supplier Purchase Matrix Report'. This would mean data shown on these reports is the same, irrespective of whether the Supplier chooses to settle NHH Export using separate MPANs for Import and Export or a single Import/Export MPAN and will aid Suppliers in reconciling their DUoS bills.

The Group discussed the potential impact of only being able to assign a single LLFC to Import and Export when using one MPAN for Import and Export. The Group agreed that this represented a step backwards in terms of flexibility, and could prevent more accurate LLFCs in the future as the actual losses could be different for Import and Export.

It was therefore agreed that this additional flexibility should form part of the Proposed Modification, allowing separate LLFCs to be assigned to Import and Export on a single MPAN and that the correct LLFCs should be included on both the Supplier (D0082) and DUoS (D0082) reports (this relates to option 3, as described above).

The Group asked for respondents to the second consultation for their views on the inclusion of separate LLFCs for Import and Export in the Proposed Modification.

3.2.2.4 Views of Respondents to the Second Assessment Procedure Consultation

The majority of those who responded to the second consultation agreed that the option to have separate LLFCs for Import and Export should be included in the Proposed Modification.

A minority of respondents indicated that they believed this would add unnecessary complexity to the Proposed Modification.

3.2.2.5 Modification Group's Conclusions

The Group confirmed that they believed the ability to have separate LLFCs for Import and Export should be included in the Proposed Modification, particularly as the number of microgeneration sites is likely to

[5] This additional cost assumes that the option '(b)i' has been selected. Figures are taken from the first Impact Assessment (which is available to download from the P213 page of the ELEXON website), which provided a cost comparison for these options.

increase in the future. The Group also confirmed that the D0269, D0270, D0082 and D0030 flows would also include the substituted LLFC values.

One Modification Group member expressed concern (as highlighted by one respondent to the consultation) that the detailed solution for LLFCs could benefit from further analysis as they believed it was not clear how separate LLFCs would be assigned to Import/Export MPANs and to confirm that there were no further impacts. However, the Group noted that the solution proposed for separate LLFCs was via use of a Substitution Table (just as per the assigned of different SSCs) and that one set of registration data was required to be assigned per MPAN in SMRS (as is the case currently), i.e. the Import LLFC would be assigned by the LDSO to the Import/Export MPAN in SMRS.

3.2.3 Party Agent Validation

3.2.3.1 Modification Group's Initial Discussions

The Group discussed the validation requirements for NHH MPANs and agreed that no changes are needed.

3.2.3.2 Modification Group's Conclusions

Following a query from the Supplier Agent Forum (SAF) regarding 'validation requirement 3' (as set out in section 4.2 of BSCP504) which specifically relates to when there is zero consumption, the Group believed that this section did not need to be updated. This was because the appearance of a zero consumption value (although more likely on an Export register) will be explained by the Site Visit Report or TPR and the zero Meter Reading will therefore pass validation.

3.2.4 Additional Change for Central Systems

3.2.4.1 Modification Group's Discussions

An additional system change for SVAA and MDDM was highlighted part way through the Modification. Two validation rules relating to which TPRs can be combined into an SSC would have prevented P213 working as intended. These rules are that:

- all of the TPRs associated with a given SSC must have switching times defined in local time (i.e. GMT Indicator='N') or GMT (i.e. GMT Indicator='Y'). These cannot be mixed; and
- all of the TPRs associated with an SSC must be in the same Teleswitch Group as that SSC (or no Teleswitch Group, if the SSC is in no Teleswitch Group). This prevents teleswitched and non-teleswitched TPRs being combined into a single SSC.

For P213 to work as intended, the validation rules that prevent mixing of clocktime with local or teleswitched with timeswitched would need to be relaxed in both SVAA and MDDM for Import/Export SSCs only (i.e. SSCs with Standard Settlement Configuration Type='X').

3.2.4.2 Additional Central Systems Impact Assessment

The additional Impact Assessment by Cap Gemini and Logica, indicated an increased cost of the chosen option of '(b)i' as being £14k this includes porting and testing costs (and 1 week in development timescales for Cap Gemini).

3.2.4.3 Modification Group's Conclusions

The Group noted the additional cost wasn't significant in terms of the total cost associated with this Modification.

3.2.5 Increase in the Number of SSCs

3.2.5.1 Views of Respondents to the Second Assessment Procedure Consultation

Several respondents to the second Assessment Consultation noted that both the Proposed and Alternative Modification would significantly increase the number of SSCs required. Respondents' estimates for the increase in SSCs ranged from 275 to over 3000.

Respondents raised concerns regarding the additional complexity of a significant increase in the number of SSCs and the potential risk to Settlement, due to an incorrect SSC being applied.

3.2.5.2 Modification Group's Conclusions

The Group echoed the concerns of respondents and noted that there were existing problems with Supplier Agents assigning incorrect SSCs from the total number allowed. The Group also noted that the number of new SSCs that may be requested was dependent on how many new SSCs are requested by Suppliers (to link in with existing Import SSCs associated with a new Export SSC). One Group member felt that an increase of 275 SSCs may be required. However, the Group believed that a 10-20% increase was not unrealistic (there are currently just under 700 SSCs).

3.3 Assessment of the Microgeneration Processes in the CSDs – Proposed Modification

3.3.1 Modification Group's Initial Discussions

The Group noted that some changes would be needed to the processes set out within the CSDs to accommodate P213 (e.g. registration and Change of Supplier). An initial set of amended processes were included in the Requirements Specification to show the differences between the existing processes and P213 processes.

3.3.2 Modification Group's Further Discussions

At their meeting on 19 June the Group discussed the new/amended processes required for P213, in particular when there was a Change of Supplier (CoS) from a two MPAN (P081) solution to a single MPAN (P213) solution. The Group expressed significant concerns with regards to the additional complexity of these processes and the potential impact on data quality. Therefore, the Group requested that ELEXON undertake some further analysis of the various scenarios identified in the table in section 2.4.

At the meeting on the 28 June, ELEXON presented the results of its investigation into these scenarios as process diagrams with explanatory text (see Appendix 3). The Group stepped through each of these scenarios and identified further issues and potential solutions. The Group focused on scenarios associated with the changes for P213 (not any existing issues with the P081 solution).

Scenario 5: The Group first discussed in depth scenario 5 – P081 to P213 (a change from two MPAN solution to a single MPAN) with a CoS (see Appendix 3 from process diagram and issues/assumptions). The Group agreed that it was important that the new Supplier knew that two MPANs were registered and recognised that the customer would need to inform the new Supplier. Furthermore, that the old Supplier could raise an objection to the CoS would lead to one of the MPANs not being transferred.

The Group noted that the scenario 5 process was based on the approach that the new Supplier would register the existing two MPANs before it converted them to a single MPAN (P213). The new Supplier would convert the existing Import MPAN to the Import/Export MPAN and logically disconnect the Export MPAN. The new Supplier would need to ensure that this reconfiguration and disconnection happens on the same effective date. The Group also noted that specific instructions would need to be given to the Suppliers Agents (NHHMOA and NHHDC) to ensure that the NHHMOA does not physically disconnect the Export MPAN

and that the NHHDC applies the closing read, and EAC from the Export MPAN to the Export part of the new Import/Export MPAN (starting read and forward looking EAC).

Scenario 5A: After consideration of scenario 5A, which was where the new Supplier only registers the Import MPAN, and converts this to an Import/Export MPAN and the old Supplier is required to logically disconnect the Export MPAN. The Group agreed that the obligation should be on the new Supplier to register the existing two MPANs. The Group agreed that increased/complex liaison between old and new Suppliers and would lead to more data quality problems (as the old Supplier does not know that the new Supplier is taking on both Import and Export). Furthermore, it could lead to situations where there is double accounting of the Export in Settlement and Distribution Use of System (DUoS) charging.

Scenario 1 and 1A: The Group also considered the scenarios where there was CoS from a P213 (single MPAN) solution to P081 (two MPANs), scenarios 1 and 1A. The Group noted that the new Supplier needs to be aware of the existing number of MPANs and this would be from liaison with the customer. Further complexity was identified (in scenario 1A) where there was a CoS to two new Suppliers, e.g. from one Supplier for Import/Export to two separate Suppliers one for Import and another for Export. Potential issues may arise when two sets of agents (MOs/DCs) would be requesting data from the old Suppliers agents.

Scenario 13A and 13B: The Group also considered the processes required for Change of Supplier where there was no Export to a P213 solution (scenario 13A) and from a P213 solution to no Export (scenario 13B). No particular issues were identified for these two scenarios.

Initial Conclusions: The main considerations and conclusions were:

No lessons could be learnt from the CoS for the existing P081 requirements, as the P081 registrations of 25 Export MPANs were relatively new and no CoS for these had taken place.

The key assumptions that were made by the Group were that:

- the P213 CoS process was based on the approach that the existing two MPANs would be transferred first to the new Supplier, then the new Supplier would change the registration from 2 MPANs to the single MPAN (P213) solution;
- the new processes relied on the new and old Suppliers obtaining the correct information from the customer in order to be able to undertake a correct Change of Supplier. The Group noted that the customer was a key element in making the process work, as situations could arise where both MPANs were not transferred correctly to the new Supplier, or there could be double accounting for the Export; and
- there would be manual processes outside of DTC flows required to support the P213 solution, although the Group recognised that existing Settlement processes have manual steps.

The Group agreed that the most likely scenarios would initially be a change from the P081 solution to P213, recognising that there are currently 25 Export MPANs registered; and then from a no Export situation to a single MPAN Import/Export solution (P213).

The majority of the Group were concerned that by supporting both a two MPAN (P081) and a single MPAN (P213) solution, additional complexity was introduced which could lead to data quality issues and potential double accounting in Settlement; and the possibility of double accounting of DUoS charging by the LDSO if the MPANs had not been transferred or re-registered accurately.

One Group member noted the potential need to audit these arrangements closely as these processes have greater potential for data to fail to be processed, especially when there are subsequent CoS or CoA activities.

An observation was made that having two separate processes for settling NHH Export seemed to add unnecessary complexity, especially given the current low use of the existing process and the perceived numbers of sites with Export capability. Due to the complexity of the processes required for allowing Suppliers to register two separate MPANs for Import and Export (to allow different Suppliers for Import and

Export); the Group considered the option of an alternative where this complexity would be reduced, by removing the option of using the P081 solution.

The Group noted certain initial respondent comments regarding P081 and that arrangements are in place and should be made to work. One respondent suggested the current arrangements could be made mandatory. The Group noted that this option was not within the scope of P213.

The Group agreed that, for the new processes described in Appendix 3, it would be best to create new sections within BSCP501 'Supplier Meter Registration Service', BSCP504 'Non Half Hourly Data Collection for SVA Metering Systems Registered in SMRS' and BSCP514 'SVA Meter Operation for SVA Metering Systems Registered in SMRS'; rather than trying to modify or add additional steps to existing processes specifically for NHH Import/Export MPANs. It was agreed that this would aid clarity for all participants. Full details of the changes required to the CSDs are included in Appendix 5.

Given the complexity noted above, the Group were keen to understand whether respondents to the second consultation:

a. supported the principle that the new Supplier should be responsible for logically disconnecting the Export MPAN if they wish to move to the single MPAN solution (proposed modification only); and

b. had concerns or suggestions regarding how, during a CoS process, reliance is placed on the customer to provide information about the current status of the site (1 or 2 MPANs, 1 or 2 Suppliers, etc).

3.3.2.1 Views of Respondents to the Second Assessment Procedure Consultation

Supplier Responsibility – the majority of those who responded to the second consultation agreed on the principle that, on a Change of Supplier, the new Supplier should be responsible for logically disconnecting the Export MPAN if they wish to move to the single MPAN solution.

Customer Provision of data – the majority of those who responded to the second consultation agreed that a degree of reliance would have to be placed on the customer's information, to make this process work. Several respondents noted a concern that customer information is often unreliable and that in some situations (e.g. Change of Tenancy) the customer may have no idea of the current arrangements.

3.3.2.2 Modification Group's Conclusions

The Group discussed the concerns raised by respondents to the second consultation and agreed, that while the customer's information would often be crucial, it should be the new Supplier's responsibility to confirm what the current arrangements for a particular site are, before seeking to change the microgeneration metering arrangements. The Group noted a continued risk of the double recording of microgeneration Export, should Suppliers not fully investigate the current arrangements for a given site/customer.

The Group noted that the CSD changes would need to be drafted and confirmed early in the Implementation of P213 to provide participants certainty around the detailed requirements of the new processes for P213.

3.4 Assessment of the Microgeneration Processes in the CSDs – Alternative Modification

3.4.1 Modification Group's Initial Discussions

Discussions (set out in section 3.3.2) under the proposed solution had indicated that having two processes (either 2 MPANs or 1 MPAN) for settling NHH Export was unnecessarily complicated and therefore a single process might be more appropriate. The Proposed Modification specifically seeks to allow for the option of 1 or 2 MPANs and therefore having just a single approach is not possible under the Proposed.

The Group noted that a single solution would remove the complexity of moving between the 1 and 2 MPAN solutions and reduce the associated risk to Settlement of failure to process data accurately (a concern raised

by a few respondents). However, having the P213 approach (1 Import/Export MPAN) only would remove the ability for a customer to choose separate Suppliers for their Import and Export (unless HH Metering was used for Export, which may have other cost implications). There was concern within the Group that this might be a factor that would prevent the Authority approving this Alternative. The Group felt that concerns over competition must be weighed against having a more robust process for settling these volumes. It was noted that there is already only one way to settle NHH Export under the current arrangements, but that Parties are not using this process (only 25 Export MPANs currently registered).

The Group have considered information within the DTI ENSG WP4 P02 Report (Scheme to Reward Microgenerators for Exporting Excess Electricity) and the 2004 Ilex Report (Metering, Settlement and Export Reward Options for Microgeneration) and queried why the current processes are little used as part of the initial consultation. Responses to the initial consultation indicated that the process is little used because of the complexity/cost of the current arrangements or because the small size of the NHH Export market doesn't justify the cost of the internal system changes needed to accommodate NHH Export. Responses to the initial consultation are included in Appendix 6. One Modification Group attendee felt that these factors could mean that P213 may not achieve the desired result, in increasing the volume of NHH Export energy recorded in Settlement.

The Group noted that a reduced number of scenarios would be possible under this Alternative:

- P213 Import/Export Change of Supplier;
- P213 Import/Export to no Export recorded in Settlement; and
- No Export recorded in Settlement to P213 Import/Export.

An observation was made that, should the Alternative be approved, then a one off exercise would need to be undertaken to migrate those sites currently settling Import and Export on separate NHH MPANs, to move them to joint Import/Export MPANs (so that they are compliant with the P213 solution).

3.4.2 Views of Respondents to the Second Assessment Procedure Consultation

Those respondents who preferred the Alternative Modification when compared to the existing baseline (5 of 17 respondents) or the Proposed Modification (8 of 17 respondents), usually preferred the Alternative because of the reduced complexity in the CoS processes.

3.5 Possible Alternatives to the Settlement Accuracy Solution Proposed in P213

3.5.1 Modification Group's Discussions

No Alternative solution to the settlement accuracy solution set out in the Proposed Modification was developed by the Group. The Group believed that this was the most cost-effective approach to maintaining settlement accuracy for a single Import/Export MPAN.

3.6 Potential P213 Alternative Modifications Considered

3.6.1 Views of Respondents to the First Assessment Procedure Consultation

Several suggestions for Alternatives that should be considered were included in the responses to the initial consultation:

- Mandate the registration of Export in Settlement - require all NHH Export to be recorded in settlement;
- Allow the use of 'related' or Import and Export 'pairs' of MPANs
- Improve the profiling of Export, and Import with associated Export at the same site.

3.6.2 Modification Group's Further Discussions

The Group noted that the use of related MPANs would be an MRA change rather than a BSC change, and that this change had been suggested and rejected through the MRA change process.

The Group discussed the comments received in response to the Initial Consultation highlighting a concern that the accuracy of Settlement for NHH microgeneration Export would be compromised by the Proposed Modification. The Group confirmed that the Proposed Modification seeks to maintain the current level of Settlement accuracy for NHH Import/Export sites; and that no new profiling error would be present on P213 Import/Export MPANs when compared to the existing P081 approach for separate Export and Import MPANs.

3.6.3 Views of Respondents to the Second Assessment Procedure Consultation

Of those participants who suggested alternatives to P213:

- three respondents indicated that they believed P081 should be made compulsory so that all Export is recorded in settlement;
- two indicated that they believed the P081 process should be reviewed, so as to better understand why it is little used and improve these current processes; and
- two suggested a domestic/non domestic split, where non domestic customers could choose a 2 MPAN or single MPAN approach and domestic customers could only use a single MPAN (P213 approach). This would allow different Suppliers for Import and Export (and hence greater competition) for those non domestic customers who are most likely to want seek different Suppliers.

3.6.4 Modification Group's Conclusions

3.6.4.1 Compulsory P081

The Group discussed the possibility of mandating the settlement of Export, and noted that there are already requirements outside the BSC on customers to inform a distributor when they install a microgenerator which can Export over 16 Amps per phase.

The Group noted that some respondents were against this idea as it would represent an increased cost for microgeneration (which could mean that small microgeneration becomes less economically viable). The Group also highlighted some concern over whether the BSC was the right place for this type of requirement and believed this was a matter outside of the Code, e.g. Supplier licence.

The Group also noted that this option is outside the scope of the defect described by P213, and as such would have to be raised as a new Modification, if it were considered that it could be progressed under the BSC.

3.6.4.2 Review of P081

The Group agreed that a full review of the existing microgeneration arrangements might be useful to further understand the reasons behind the low take up of P081. One Group member noted that, these reasons may relate to the cost of systems' changes that are needed to operate P081 and that the currently low levels of suitable microgeneration sites, rather than issues with the process itself.

The Group also noted that a full review of the current microgeneration processes is outside the scope of P213.

3.6.4.3 Domestic/Non Domestic Split

The Group agreed that domestic customers were more likely to want to have a single Supplier for both Import and Export; however, they felt that the scope for this to happen was already present in the Proposed Modification (with Suppliers choosing on an individual basis whether to use a single MPAN or not).

However, the Group concluded that this approach would create further complexity for the P213 solution, thereby negating the rationale for having the split, i.e. to reduce overall complexity, for very little benefit.

3.6.4.4 Review of Current Capacity Limit

The Group noted a view from one respondent that the current capacity limit for settling generation using Non Half Hourly Meter readings should be reviewed. The Group noted that the BSC Panel has the ability to review the capacity limit from time to time (with the approval of Ofgem) and that the current limit is 30kW.

3.7 Government and Other Initiatives

3.7.1 Modification Group's Discussions

The Group, mindful that they are required to consider the Modification Proposal in terms of the Applicable Objectives, considered information from a variety of sources to aid their understanding of the current situation regarding microgeneration. These included the Energy White Paper, a BSC Panel update from the Smart Metering Review Group, information from the ERA, the DTI Report resulting from the ENSG W04 P02 Group and the Ilex study.

The Group noted that significant industry change is likely in the area of microgeneration over the coming years. The Group agreed that this does impact on the longevity of the Proposed Modification and whether or not it is regarded as an "interim solution", which in turn affects the business case for making the changes proposed under P213.

The Group also noted the requirements on Parties arising from the Climate Change and Sustainable Energy Act which seeks to promote greater use of sustainable energy and that Suppliers are encouraged to seek solutions to facilitate this. In light of these requirements the Group asked respondents to the second consultation to indicate whether they believed the Climate Change and Sustainable Energy Act justified the implementation of P213 outside the normal release schedule.

3.7.2 Views of Respondents to the Second Assessment Procedure Consultation

The majority of respondents believed that the Climate Change and Sustainable Energy Act did not justify a separate release for P213 and that P213 should be included in one of the normal scheduled releases.

3.7.3 Modification Group's Conclusions

The Modification Group noted the comments received and agreed that P213 should be implemented as part of a scheduled release.

3.8 Potential Impact on the Accuracy of GSP Group Correction Factor

3.8.1 Modification Group's Discussions

The Group considered the potential impact on the accuracy of Settlement resulting from microgeneration that is not recorded in Settlement (from the 'spill' of microgeneration Export onto the Distribution Network, and the inaccuracy of Import profiling for customers with microgenerators). The Group agreed that this cannot currently be significant, as Suppliers already have processes in place (resulting from P081) to reduce its impact, so if it were considered to be significant, more Suppliers would be using the P081 solution. The Group felt that as long as the option to use these processes is in place, should the error be considered significant in the future, it is likely that Suppliers would simply seek to register more NHH Export in Settlement.

3.8.2 Views of Respondents to the Second Assessment Procedure Consultation

One respondent noted that they disagreed with the Group's views, and felt that those Suppliers who choose not to register microgeneration in settlement are being disadvantaged because all Suppliers in the GSP Group will benefit from the microgeneration produced.

3.8.3 Modification Group's Conclusions

The Group noted the comment above, but felt that its previous arguments stood, and the Supplier could choose to register the site in settlement if they wanted to.

3.9 Benefits/Costs of the Proposed and Alternative Modifications

Details of the costs and benefits of P213 (Proposed and Alternative) are set out in section 3 (particularly 3.11 - Implementation Approach, Impact Assessment and Costs) and Appendix 5 - Impact Assessment.

3.10 Central System Impacts and Participants System/Process Impacts

Details of the Impact of P213 and P213 Alternative are described in detail in sections 3.11 and Appendix 5 of this document.

3.11 Implementation Approach, Impact Assessment and Costs

3.11.1 Results of the First Central Systems Impact Assessment

A summary of the total costs provided as a result of the First Central Systems Impact Assessment is provided below.

Please note that the following options were being considered at this time:

3.11.1.1 Proposed Modification

Three options were under consideration regarding the extent to which the Substitution Table would be published to industry, differing in the level of transparency, and the impact on participant systems:

(a) Substitution Table used by SVAA only – for this option, the Substitution Table would be used by the SVAA only and would not be provided for use by any other participant. Profile coefficients reported by SVAA would be constructed using the Substitution Table, but the Substitution Table data used to construct them would not (except perhaps through the paper and minutes of the Panel Committee that approved the data).
This option would only require minimal changes to MDDM. The advantage of this approach is that it minimises the impact on participant systems, but there is reduced transparency.

(b) MDD data flows include the Substitution Table information – for this option, the data used in the Substitution Table would be included in MDDM (and MDD data flows received by participants). This would increase the visibility of the data applied. MDDM software and MDD data flows would need be updated to allow:

1. allow a third value of SSC Type (e.g. 'X'), for use with Import/Export SSCs;
2. allow the Export/Import flag to be assigned at a register level for type 'X' meters ; and
3. create a new table to hold the Substitution Table used by SVAA.

There are 3 possible options for the MDD data flow(s) that could be used to send this information. These form subcategories for option (b) and are:

iv. D0269 and D0270 – additional data would be provided to all participants to ensure transparency, but would potentially impact all participant systems receiving the flows;
v. D0280 - additional data would be provided to Suppliers to aid transparency, but would potentially impact all Supplier systems receiving the flows; or

vi. a new MDD data flow created specifically for this purpose. This would help ensure that only those participant types who need the data are impacted.

(c) Data published on the BSCCo website (rather than included in MDD) – this option is intended to provide transparency (so that the values applied in SVAA are visible) while reducing the impact on participants systems. Data would not be provided in MDD; however, it would be available to view on the BSCCO website if required.

3.11.1.2 Potential Alternative Modification

It is noted that this is not the P213 Alternative described elsewhere in this document, but relates to the ability to have separate LLFCs for Import and Export, which is now part of the Proposed Modification.

Three options were provided within the Requirements Specification as to how widely the Substitution Table LLFC data should be used:

1. **Multiple LLFCs allowed** – for this option the LLFC would be included in the Substitution Table, and used by the SVAA, but the information would not be passed on to be included in the DUoS or other reporting;
2. **Multiple LLFCs allowed and included in the Distribution Use of System (DUoS) Reports** – LLFCs would be included in the Substitution Table as described above, however, in this case the LLFCs (as applied by SVAA) would be shown in the DUoS reporting (D0030); or
3. **Multiple LLFCs allowed and included in DUoS reports and the D0082 (Supplier) Reporting –** LLFCs would be included in the Substitution Table as described above, however, in this case the LLFCs (as applied by SVAA) would be shown in the D0030 and D0082 reports.

Option	Summary Cost[6]	Estimated Lead time[7]
Proposed Modification		
(a)	£272,708	25 weeks
(b)	£295,043	26 weeks
(b)ii	£294,595	26 weeks
(b)iii	£295,938	26 weeks
(c)	£272,708	25 weeks
Potential Alternative[8]		
1	£312,287	28 weeks
2	£347,414	30 weeks
3	£355,201	31 weeks

3.11.2 Results of the Second Central Systems Impact Assessment

A further Impact Assessment was carried out for Logica and Cap Gemini (SVAA and SVOSS) due to an additional impact (as described in section 3.2.4) being noted following the original Impact Assessment.

This second Impact Assessment was only carried out for the option chosen by the Modification Group – which was option '(b)' combined with option 3 from the potential alternative described above.

[6] Including estimated ELEXON, Cap Gemini (SVAA and SVAOSS) and Logica costs to implement P213.
[7] Total ELEXON, Cap Gemini (SVAA and SVAOSS) and Logica timescales.
[8] Subsequently part of the Proposed Modification.

The additional total cost was £14,000 and 1 extra week lead time (this additional time/cost includes a provision for porting and testing). This takes the total ELEXON, Logica and Cap Gemini cost to £369,000 (±20%) and the total lead time for the Central Systems changes to 32 weeks.

3.11.3 Results of the Party Agent Impact Assessment

The Party and Party Agent Impact Assessment were carried out at the same time as the Central Systems Impact Assessment and indicated that participants would be impacted as follows:

- New processes for the registration of Import/Export MPANs, Change of Supplier, and disconnection will need to be operated;
- MDD data flows will include additional information, which may need to be loaded into internal systems; and
- internal systems may need to be updated to allow information on Import/Export MPANs to be stored.

Supplier Agents indicated that (where timescales were provided); at least 6 months were needed to prepare for P213 should it be approved, with one Party Agent/LDSO indicating that they would require 18 months. Suppliers indicated that in excess of 12 months were required (where timescales were provided). The Group noted, with some concern, that no details of the potential cost for Parties and Party Agents had been provided within the responses. ELEXON noted that some figures had been provided, but as they had been marked confidential, these would only be provided to Ofgem.

The non-confidential responses to the Impact Assessment are included in Appendix 9.

3.11.4 Additional Impacts on BSC Parties and Party Agents noted in the Second Assessment Consultation

One Distribution System Operator and one Supplier provided indicative costs for implementing the Proposed or Alternative Modifications. These were £140,000 and £2,000,000 respectively. The Supplier qualified this figure by indicating that this would be the cost of updating 2 systems, as their business would be part way through an internal systems upgrade at the proposed implementation date. Depending on when P213 was to be implemented may reduce these costs as changes may only be required to their new systems.

Participants noted the following impacts:

- Software/system upgrades to allow the receipt of updated MDD Data Flows and to allow Import/Export MPANs within internal systems;
- Billing system upgrades;
- Retraining of staff on the new procedures (including call centre staff and field agents);
- New procedures and documentation;
- Migration of existing P081 MPANs (Alternative only);
- Additional work correcting errors, due to poorer data quality resulting from the new processes; and
- New SSCs will need to be created and for the Alternative only the existing Export SSCs will need to be removed.

One respondent noted that they would require further more detailed information before the full impact of P213 (Proposed and Alternative) could be confirmed.

3.11.5 Summary of Impacts

a) BSC Agent Impact

SVAA - the changes required to systems and processes required to achieve this can be summarised as follows:

- Amendments are required to the profiling component of the SVAA system, so that profile coefficients for Import/Export SSCs are selected by reference to the Substitution Table. This requires a new value of the SSC Type flag to identify Import/Export SSCs. These changes are described in Appendix 4;
- A process is required for providing the Substitution Table to SVAA. The MDD data flows that will be used to send this information are the D0269 and D0270. This additional data would be provided to all participants to aid transparency, but would potentially impact all participant systems receiving the flows; and
- The meter reading processing carried out by NHHDCs should remain unchanged, with Import/Export Metering Systems handled in a similar way to any other multi-register Metering System. No changes are envisaged to the EAC/AA calculator used by the NHHDC or the NHHDA software; and
- all of the TPRs associated with a given SSC must have switching times defined in local time (i.e. GMT Indicator='N') or GMT (i.e. GMT Indicator='Y'). These cannot be mixed; and
- all of the TPRs associated with an SSC must be in the same Teleswitch Group as that SSC (or no Teleswitch Group, if the SSC is in no Teleswitch Group). This prevents teleswitched and non-teleswitched TPRs being combined into a single SSC.

MDD Data Flows - Version 3 of D0269 'Market Domain Data Complete Set' and D0270 'Market Domain Data Incremental Set' data flows will be updated to include the SVAA Substitution Table information. It is noted that version 2 of the D0269 and D0270 will not be updated.

MDDM - the data used in the Substitution Table would also be included in MDDM. MDDM software (and MDD data flows) would need to be updated (as described above in changes 1-3) to:

- allow a third value of SSC Type (e.g. 'X'), for use with Import/Export SSCs;
- allow the Export/Import flag to be assigned at a register level for type 'X' meters ; and
- create a new table to hold the Substitution Table used by SVAA.

LLFCs - changes to allow the separate LLFCs to be applied to the Import and Export on an Import/Export MPAN will be achieved by:

- including the additional Export LLFCs in the SVAA Substitution Table (with the Export Profile Class, etc). These values would then be used by SVAA in their calculations and would be updated, as with the other data items included in the table, via MDD; and
- the substituted Profile Class, SSC and LLFC would also be reported on the D0030 'Non Half Hourly DUoS Report' and the D0082 'Supplier Purchase Matrix Report'. This would mean data shown on these reports is the same, irrespective of whether the Supplier chooses to settle NHH Export using separate MPANs for Import and Export or a single Import/Export MPAN and will aid Suppliers in reconciling their DUoS bills.

A more detailed list of impacts on Central Systems is available in the full Impact Assessments provided by Logica and Cap Gemini, which are available on the P213 page of the ELEXON website.

b) BSC Party and Party Agent Impact

The change to version 3 of the MDD data flows could impact Supplier, Supplier Agents (NHH and HH), LDSO and SMRA processes and systems, depending on how individual participants process the MDD files.

Suppliers will be impacted by the Proposed Modification, as they will need to be able take on (through the Change of Supplier processes) both P081 and P213 type MPANs. Suppliers currently operating the P081 process will be more significantly impacted by the Alternative Modification as existing Export sites which are included in settlement will need to be migrated over onto P213 MPANs.

NHH Supplier Agents (particularly Meter Operators) may need to update their systems and will need to update their processes for identifying collecting, recording and aggregating Import and Export data from a single MPAN.

LDSOs will be impacted by the Proposed Modification as they will need to accept new SSCs for Import/ Export MPANs and assign the correct LLFCs, etc.

It is noted that SMRS and hence ECOES (Electricity Central Online Enquiry Service) will not reflect the 'correct' information held at SVAA in the Substitution Table (e.g. where there are different LLFCs for Import and Export on an Import/Export MPAN). SMRS will hold the single Import/Export SSC as described in section 2.3.1.

A more detailed list of the impacts noted by Parties and Party Agents is available in Appendix 9.

c) Transmission Company Impact

No impact.

d) BSCCo Impact

ELEXON indicated that 1 month would be required following the receipt of the updated SVAA and MDDM systems to undertake final testing.

CSD documentation will need to be updated to include new sections describing the revised processes, a walk through of these new processes is also recommended as part of the implementation of P213.

Including documentation updates, testing, walk-through and release overheads 248 man days are required to implement P213 (Proposed or Alternative) at a cost of approximately £54,560. This cost is included in the figures provided in section 3.11.1.

A more detailed list of impacts on BSCCo is available in the full impact Assessments, available on the P213 page of the ELEXON website.

3.11.6 Results of Alternative Modification Impact Assessment

3.11.6.1 Central Systems and BSCCo

It is noted that the Central Systems impacts will be the same for both the Proposed and Alternative Modifications.

3.11.6.2 Parties and Party Agents

In addition to the Impacts noted for the Proposed Modification, participants would need to undertake a migration exercise to convert the existing 'P081' MPANs to P213 joint Import/Export MPANs.

3.11.7 Views of Respondents to Assessment Procedure Consultation (Implementation Timeframe)

The majority of respondents indicated that at least **12 months** was required to implement P213 (Proposed or Alternative). One Supplier indicated that **24 months** was required and 2 further Suppliers indicated that **18 months** were needed. All respondents indicated that time would be need to amend their processes and systems to accommodate P213 with the amount of time required dependent on the extent of the changes believed to be required. The respondent, who stated that 24 months was required, believed that due to the proposed implementation time frame and their current activity of replacement of existing systems this timescale was justified.

One Supplier indicated that they believed that they had insufficient detail and time to provide an accurate estimate of the timeframe needed.

3.11.8 Modification Group's Conclusions

The Group considered the responses received and discussed, in more detail the following areas.

3.11.8.1 Migration (Alternative only)

The Group discussed the timeframe for migrating existing P081 MPANs into P213 MPANs, noting that each migration would require a logical disconnection (for the Export MPAN) and a reconfiguration of the Import MPAN (to Import/Export). The Group also noted that some of the existing P081 MPAN 'pairs' could have different Suppliers for the Import and Export, and as such, the process may not be straightforward in all cases. Furthermore, the Group noted that a process for managing any such MPANs would need to be agreed as part of the implementation of P213 Alternative.

The Group agreed that the speed of the migration should be determined by the total number of NHH Export MPANs at the time of migration, as while 25 MPANs could be migrated quite quickly there would be a greater risk if several hundred were to be migrated on a single day.

Therefore, the Group agreed that if there are less than 100 P081 MPANs to be migrated, then they should be migrated in one month. If more than 100 P081 MPANs exist on the implementation date then an additional month should be added for every additional 500 P081 MPANs.

The Group agreed that the migration should take place after the implementation date once the processes are in place to enable a single Import/Export MPAN.

3.11.8.2 MDD Updates

The Group noted that new SSCs would need to be approved (within MDD) before they can be used. This will mean a short delay following the implementation of P213, before the single MPAN solution can actually be used. ELEXON subsequently confirmed that, any new SSCs could be requested as part of the implementation of P213 and any interaction would be restricted to the P213 implementation data and the MDD Release date. MDD Release dates are set in relation to the SVG meetings. However, SVG meetings have not yet been scheduled for 2009, but it is believed that the MDD Release date would be the 1st week of December, approximately four weeks after the implementation of P213.

3.11.8.3 CSD Drafting

The Group noted that the finalised text for the CSDs should be drafted at the start of the implementation period to provide certainty around the detailed requirements.

3.11.8.4 MRA

To allow participants to use a single MPAN for Import and Export a change to the MRA would be required (more detail this is included in Appendix 5). The Proposer (E.ON UK) intends to raise this change.

3.11.8.5 Final Conclusions

The Modification Group therefore agreed the following recommended implementation approach for P213:

- An Implementation Date for the Proposed Modification of 05 November 2009 provided that a decision has been received from the Authority by 05 May 2008.
- An Implementation Date for the Alternative Modification of 05 November 2009 provided that a decision has been received from the Authority by 05 May 2008.

This Modification Proposal would be implemented such that Settlement systems and processes are capable of supporting an Import/Export MPAN from the implementation date of the Modification.

3.12 Legal Text

The Modification Group walked through the Legal text and agreed that it delivers the solution developed by the Group.

The Group noted that the BSC does not currently state that Suppliers may have two MSIDs (referred to as MPANs within this document and under the MRA), one of Import and one for Export. This is because such rules fall outside the BSC and are only contained in the MRA. As a consequence, the changes required to the BSC in respect of the Proposed and Alternative solutions are limited to changes to the Profile Coefficients and Line Loss Factor Class as they are the only items that are impacted and which are also set out in the BSC. The Group also noted that Suppliers will not be able to utilise the solutions without the appropriate changes to the MRA.

A copy of the draft legal text can be found in Appendix 1.

3.12.1 Proposed Solution – Summary of the Changes Included in the Legal Text

3.12.1.1 Profile Coefficents

Changes are made to Annex S-2 (6.6.1 and 6.7.1) to require the use of the Substitution Table for Import/Export MPANs.

An additional paragraph (6.7.1.A) is also added to Annex S-2 which sets out the algebra to be used for Import/Export MPANs, and allows the Substitution Table to be used for these MPANs.

Newly defined terms have been added to Annex X-1 and X-2.

3.12.1.2 Line Loss Factor Classes

Changes are made to Annex S-2 (paragraph 8.1.4) to allow the Export LLFC to be included in the Substitution Table, and a new definition is added to Annex X-2.

3.12.1.3 Metering Point

Minor changes are made to update the definition of Metering Point in Annex X-2 to correct the reference to the MRA (Schedule 9 is updated to Schedule 8) and minor wording changes are made to ensure that it is clear that a Metering Point may relate to supply (Import) and/or demand (Export).

3.12.2 Alternative Solution – Summary of the Changes Included in the Legal Text

The Modification Group noted that Suppliers will not be able to utilise the Alternative Solution without the equivalent changes to the MRA, the changes needed to the MRA are described in more detail in Appendix 5. It is noted that if this Modification (P213 Alternative) were to made without a change to the MRA then the MRA and BSC would be inconsistent; and participants would be non compliant with either the MRA or BSC by settling NHH Export and Import on a single MPAN or 2 MPANs (respectively).

Changes are made as for the Proposed Modification described above in section 3.12.1. In addition the following change is required.

3.12.2.1 Metering Equipment

Changes are made to Section L (paragraph 2.2.1) to make it expressly clear that NHH Export must be recorded with NHH Import on a single SVA Metering System; otherwise the Export must be recorded as Half Hourly.

The Group noted that a single SVA Metering System must correspond to a single MSID as set out in Section K of the BSC.

In addition, the Group noted that no changes are needed to Section K paragraph 1.6.1 as this already provides for a P213 environment.

4 ASSESSMENT OF MODIFICATION AGAINST APPLICABLE BSC OBJECTIVES

This section outlines the views of consultation respondents and the Modification Group regarding the merits of P213 against the Applicable BSC Objectives.

4.1 Proposed Modification

4.1.1 Modification Group's Initial Discussions

The Modification Group initial views were **SPLIT** as to whether the Proposed Modification would better facilitate the achievement of Applicable BSC Objectives (c) and (d) when compared to the current Code baseline, for the following reasons:

Applicable BSC Objective (c)

Those that felt the Proposed Modification did better facilitate competition made the following arguments:

- it gives Suppliers the opportunity to reduce transaction costs associated with registering and collecting/processing data from Meters recording the Export from microgeneration. Reducing these transaction costs would have a positive impact on competition in the purchase of electricity from microgeneration which will, in turn, will lead to increased competition in the installation and production of electricity from microgeneration; allowing such generation to compete more effectively;
- ensures the accuracy of profiling arrangements is not compromised if changes are implemented under other industry documents to facilitate this outcome;
- a single MPAN solution under P213 would provide a more efficient approach to the treatment of microgeneration, however care would need to be taken if significantly more sites were to be registered in Settlements;
- it would make it easier for Suppliers to register microgeneration in Settlements; and
- one member felt that, in principle, P213 should facilitate competition in the area of microgeneration; however, they noted the complexity/data quality issues raised in the Group's consideration of the various scenarios. Problems could arise if participants did not adhere to the processes set out in Appendix 3.

Those that felt the Proposed Modification did not better facilitate competition made the following arguments:

- that having two processes for settling NHH Export complicated the arrangements for participants.

Applicable BSC Objective (d)

Those that felt the Proposed Modification did improve efficiency made the following arguments:

- the streamlining of processes associated with the collection and processing of data from microgeneration will reduce the potential for errors to occur leading to improved efficiency in the implementation and administration of the Balancing and Settlement arrangements.

Those that felt the Proposed Modification did not improve efficiency made the following arguments:

- that having two options for settling NHH Export unduly complicated the Settlement processes and would make them less efficient;
- under the Proposed Modification, in scenario 5 (where the new Supplier wishes to convert a P081 2 MPAN to a P213 1 MPAN) the Supplier would need to register both MPANs as a P081 set-up first and then move then to a P213 solution, so Supplier systems would need to be able to cope with P081 as well as P213; and so this proposal does not avoid the problem where a Supplier might want to just change his systems to cater for P213 and not for P081;
- one member felt that the proposal only addressed the belief the administrative costs associated with having a second MPAN are deterring Suppliers from settling a greater number of Export sites and that this assumption had not been proven; and
- the additional complexity of the Change of Supplier process could lead to data quality issues which would require additional resource to resolve any central issues.

Applicable Objectives (a) and (b)

The majority of the Group agreed that the Proposed Modification would have a neutral impact on Applicable BSC Objectives (a) and (b). However, one member felt you may be able to construct an argument in relation to better facilitating objective (b); as, if the System Operator had increased metered Export data for microgeneration (rather than the energy simply spilling and distorting the Group Correction Factor) this might have advantages for System Operation.

4.1.2 Views of Respondents to Assessment Procedure Consultation

The **(SLIGHT) MAJORITY** view of respondents to the Assessment Procedure consultation was that the Proposed Modification **WOULD** better facilitate the achievement of **Applicable BSC Objectives (c) and (d)**.

The views expressed by respondents were similar to the initial views of the Group above. In addition to reasoning described in section 4.1.1, the following rationale was provided:

Applicable BSC Objective (c)

Those that felt the Proposed Modification did better facilitate competition made the following arguments:

- there are very few NHH export sites currently registered under P081. They agreed with the Proposer that a possible cause for the low numbers is that the current 2 MPAN solution adds an administrative cost that may outweigh the benefits of registering the export. Giving Suppliers the option to register both Import and Export on a single MPAN provides an opportunity for these costs to be reduced and would make it more likely that Export would be registered thus increasing competition; and
- that P213 would better achieve the BSC Objectives, as it would ensure smoother transfer between parties for Import/Export Metering Systems.

Applicable BSC Objective (d)

Those that felt the Proposed Modification did <u>not</u> improve efficiency made the following arguments that:

- P213 does not offer a coherent approach to Import/Export sites and would move away from the tried and tested 'one MPAN for Import and one MPAN for Export' already used in the NHH and HH Markets;
- the proposed arrangements for calculating the profiled flow would introduce unnecessary complexity and potential for error; and
- P213 will create significantly more SSCs, and that this increase, will in itself pose an increased risk to settlement.

4.1.3 Modification Group's Assessment

The **MAJORITY** view of the Modification Group was that the Proposed Modification **WOULD NOT** better facilitate the achievement of **Applicable BSC Objectives (c) and (d)** when compared to the current Code baseline, for the following reasons:

Applicable BSC Objective (c)

Those that felt the Proposed Modification did not better facilitate competition made the following key arguments:

- that there was little evidence to show that P213 will be used more widely than P081; and
- that the additional complexity would not aid competition, as the three options (not registering Export, registering Export on an Export only MPAN, or registering it on a joint Import/Export MPAN) would simply cause confusion and cause additional costs for Suppliers.

The Group member who felt the Proposed Modification did better facilitate competition made the following arguments:

- it gives Suppliers the opportunity to reduce transaction costs associated with registering and collecting/processing data from Meters recording the Export from microgeneration. Reducing these transaction costs would have a positive impact on competition in the purchase of electricity from microgeneration which will, in turn, lead to increased competition in the installation and production of electricity from microgeneration; allowing such generation to compete more effectively; and
- ensures the accuracy of profiling arrangements is not compromised if changes are implemented under other industry documents to facilitate this outcome.

Applicable BSC Objective (d)

Those that felt the Proposed Modification did not improve efficiency made the following key arguments:

- that the processes required by P213 were significantly complex and presented a real risk to data quality, in particular when relying on the customer to provide accurate and timely information to the new Supplier;
- that having two options for settling NHH Export unduly complicated the Settlement processes and would make them less efficient;
- under the Proposed Modification, in scenario 5 (where the new Supplier wishes to convert a P081 two MPAN to a P213 single MPAN) the Supplier would need to register both MPANs as a P081 set-up first and then move then to a P213 solution, so Supplier systems would need to be able to cope with P081 as well as P213; and so this proposal does not avoid the problem where a Supplier might want to just change his systems to cater for P213 and not for P081; and

- one member felt that the proposal only addressed the belief the administrative costs associated with having a second MPAN are deterring Suppliers from settling a greater number of Export sites and that this assumption had not been proven.

The Group member who felt the Proposed Modification did improve efficiency made the following arguments:

- the streamlining of processes associated with the collection and processing of data from microgeneration will reduce the potential for errors to occur leading to improved efficiency in the implementation and administration of the Balancing and Settlement arrangements.

Applicable BSC Objectives (a) and (b)

The Group agreed that the Proposed Modification would have a neutral impact on the Applicable BSC Objectives (a) and (b).

4.2 Alternative Modification

4.2.1 Modification Group's Initial Discussions

The initial **MAJORITY** view of the Modification Group was that the Alternative Modification **WOULD** better facilitate the achievement of Applicable BSC Objectives (c) and (d) when compared to the Proposed Modification and the current baseline. The same reasons were provided as in favour of the Proposed Modification, save for the following further comments:

Applicable BSC Objective (c)

Those that felt the Alternative Modification did better facilitate competition made the following further arguments:

- a single process for settling NHH Export would make the arrangements simpler and more efficient for participants to use;
- it would reduce any barriers to register microgeneration in Settlement and may lead to increased registration of microgeneration;
- offered a pragmatic solution to the Settlement of microgeneration over the 'theoretical pure' solution in the Proposed Modification; and
- reduce the potential introduction of data quality issues due to the complexity of the Proposed Modification and reduce the risk of incorrect registrations within the Settlement processes.

Those that felt the Alternative Modification did not better facilitate competition made the following arguments:

- that removing the capability for separate NHH Import and Export reduces the opportunities for competition. Customers could no longer seek potentially competitive prices for separate Export and Import as they would be required to utilise a HH solution for their Export.
- One member felt on balance the Alternative did better facilitate BSC objective (c) due to simpler approach but was concerned with regards to the restriction in competition from a solution as customers would not be able to chose different Suppliers for NHH Import and NHH Export.

Applicable BSC Objective (d)

Those that felt the Alternative Modification did improve efficiency made the following arguments:

- that having one process for settling NHH Export makes them more efficient and the changes less costly; and

- would lead to less data quality issues than the Proposed Modification, thereby a reduction in administration resource to resolve these issues.

Applicable Objectives (a) and (b)

The majority of the Group agreed that the Alternative Modification would have a neutral impact on Applicable BSC Objectives (a) and (b). However, one member felt that it is possible to construct an argument in relation to objective (b) as per the Proposed Modification.

4.2.2 Views of Respondents to Assessment Procedure Consultation

The **MAJORITY** view of respondents to the Assessment Procedure consultation was that the Alternative Modification **WOULD NOT** better facilitate the achievement of **Applicable BSC Objectives (c) and (d)** when compared to the current baseline.

The respondents views were **SPLIT** as to whether the Proposed Modification would better facilitate the achievement of **Applicable BSC Objectives (c) and (d)** when compared to the Proposed Modification.

The views expressed by respondents were similar to the initial views of the Group. In addition to reasoning described in section 4.2.1, the following reasoning was provided:

Applicable BSC Objective (c)

Those that felt the Alternative Modification did not better facilitate competition made the following further arguments:

- that P213 Alternative totally goes against the Government's and Industry's drive to facilitate micro-generation as you would not be able to buy electricity from one Supplier and sell excess electricity back to another, different Supplier;
- that P213 Alternative would remove the option of registering the Import and Export MPANs separately with different Suppliers altogether and therefore reduces consumer choice; and
- that, if P213 were made the only option for settling microgeneration, it could potentially dissuade Parties who have already invested in the P081 solution from settling any more microgeneration sites. It could be argued that mandating P213 would unfairly benefit those Parties who have failed to implement the existing arrangements (P081), and penalise those Parties who have already invested in P081.

Those that felt the Alternative Modification did better facilitate competition made the following arguments:

- that removing the option for customers to have a separate supplier for Import and Export would not have a material adverse impact on competition because it is unlikely that Suppliers will offer more attractive tariffs under the dual MPAN route (at least not for the smaller customers).

Applicable BSC Objective (d)

Those that felt the Alternative Modification did <u>not</u> improve efficiency made the following arguments:

- that introducing P213 Alternative could prevent any data going through settlements due to the complexity of having two SSC/LLFC's on one MPAN.

Those that felt the Alternative Modification did improve efficiency made the following arguments:

- that it is a simpler and more streamlined solution that would increase competition when compared to both the current and P213 solution;
- that maintaining both options does not reduce complexity of settlements. P213 was requested due to issues with P081 process, so the retention of the P081 process will not eliminate those problems;

- overall, the benefits of using a single MPAN are likely to outweigh the additional complications in managing the data Substitution Table and the additional number of SSCs that are required.

4.2.3 Modification Group's Conclusions

4.2.3.1 Alternative Modification Compared to the Proposed Modification

The **MAJORITY** view of the Modification Group was that the Alternative Modification **WOULD** better facilitate the achievement of **Applicable BSC Objectives (c) and (d)** when compared to the Proposed Modification.

Applicable BSC Objective (c)

Those that felt the Alternative Modification did better facilitate competition (when compared to the Proposed Modification) made the following key arguments:

- that removing the option for customers to have a separate Supplier for Import and Export would not have a material adverse impact on competition because it is unlikely that Suppliers will offer more attractive tariffs under the dual MPAN route (at least not for the smaller customers).

Those that felt the Alternative Modification did not better facilitate competition (when compared to the Proposed Modification) made the following key arguments:

- that, if P213 were made the only option for settling microgeneration, it could potentially dissuade Parties who have already invested in the P081 solution from settling any more microgeneration sites; and
- it could be argued that mandating P213 would unfairly benefit those Parties who have failed to implement the existing arrangements (P081), and penalise those Parties who have already invested in P081.

Applicable BSC Objective (d)

Those that felt the Alternative Modification did improve efficiency (when compared to the Proposed Modification) made the following arguments:

- a single process for settling NHH Export would make the arrangements simpler and more efficient for participants to use; and
- reduce the potential introduction of data quality issues due to the complexity of the Proposed Modification and reduce the risk of incorrect registrations within the Settlement processes.

Applicable BSC Objectives (a) and (b)

The Group agreed that the Alternative Modification would have a neutral impact on Applicable BSC Objectives (a) and (b).

Alternative Modification Compared to the Baseline

The **MAJORITY** view of the Modification Group was that the Alternative Modification **WOULD NOT** better facilitate the achievement of **Applicable BSC Objectives (c) and (d)** when compared to the current baseline.

Applicable BSC Objective (c)

Those that felt the Alternative Modification did not better facilitate competition made the following key arguments that:

- if P213 were made the only option for settling microgeneration, it could potentially dissuade Parties who have already invested in the P081 solution from settling any more microgeneration sites in the short term; and
- P213 is an expensive solution for what is currently a very small market and that it might be more cost effective to look at improving P081.

The Modification Group member that felt the Alternative Modification did better facilitate competition made the following key arguments:

- it gives Suppliers the opportunity to reduce transaction costs associated with registering and collecting/processing data from Meters recording the Export from microgeneration. Reducing these transaction costs would have a positive impact on competition in the purchase of electricity from microgeneration which will, in turn, will lead to increased competition in the installation and production of electricity from microgeneration; allowing such generation to compete more effectively; and
- ensures the accuracy of profiling arrangements is not compromised if changes are implemented under other industry documents to facilitate this outcome.

Applicable BSC Objective (d)

The Modification Group Member that felt the Alternative Modification did improve efficiency made the following argument:

- the streamlining of processes associated with the collection and processing of data from microgeneration will reduce the potential for errors to occur leading to improved efficiency in the implementation and administration of the Balancing and Settlement arrangements.

Applicable BSC Objectives (a) and (b)

The Group agreed that the Alternative Modification would have a neutral impact on Applicable BSC Objectives (a) and (b).

4.3 Final Recommendation to the Panel

On the basis of the above assessment, the Modification Group therefore agreed a **MAJORITY** recommendation to the Panel that:

- The Proposed Modification **SHOULD NOT** be made; and that
- The Alternative Modification **SHOULD NOT** be made.

Details of the Group's recommended Implementation Date and legal text can be found in Section 3.

5 TERMS USED IN THIS DOCUMENT

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

Acronym/Term	Definition
CoS	Change of Supplier
CSD	Code Subsidiary Documents
HH	Half Hourly
LLFC	Line Loss Factor Class

MDD	Market Domain Data
MDDM	Market Domain Data Management
MTD	Meter Technical Details
NHH	Non Half Hourly
MPAN	Meter Point Administration Number
NHHDA	Non Half Hourly Data Aggregator
NHHDC	Non Half Hourly Data Collector
NHHMOA	Non Half Hourly Meter Operator Agent
SVAA	Supplier Volume Allocation Agent

6 DOCUMENT CONTROL

6.1 Authorities

Version	Date	Author	Reviewer	Reason for Review
0.1	24/07/07	Ysanne Hills	David Jones	For peer review
0.2	25/07/07	Ysanne Hills	P213 MG	For Modification Group review
0.3	01/08/07	Ysanne Hills	Justin Andrews	For technical review
0.4	01/08/07	Ysanne Hills	David Jones	For quality review
1.0	03/08/07	Change Delivery	N/A	For Panel decision

6.2 References

Ref.	Document Title	Owner	Issue Date	Version
1	Panel Paper 121/08	ELEXON	14/12/06	N/A
2	ENSG Report	DTI	2007	N/A
3	Ilex Report	DTI	12/2004	N/A

APPENDIX 1: DRAFT LEGAL TEXT

MODIFICATION P213

PROPOSED SOLUTION

Annex S-2: Supplier Volume Allocation Rules (version 13.0)

Paragraph 6.6.1 of Annex S-2 shall be amended as follows:

6.6.1 The SVAA shall carry out the determinations set out in this paragraph 6.6 in respect of each Settlement Day "D", each GSP Group "H" and each valid combination of Profile Class "P" and Standard Settlement Configuration "C" for Switched Load Metering Systems, save in the case where the Standard Settlement Configuration "C" is identified in the Substitution Table as being for use with SVA Metering Systems that measure both Import and Export from Small Scale Third Party Generating Plant.

Paragraph 6.7.1 of Annex S-2 shall be amended as follows:

6.7.1 In respect of each Settlement Day, each GSP Group "H" and each valid combination of Profile Class "P" and Standard Settlement Configuration "C", save in the case where the Standard Settlement Configuration "C" is identified in the Substitution Table as being for use with SVA Metering Systems that measure both Import and Export from Small Scale Third Party Generating Plant, the SVAA shall determine the Period Profile Class Coefficients ($PPCC_{HPRj}$) for each combination of Time Pattern Regime associated with such Standard Settlement Configuration and such Standard Settlement Configuration "R" as follows:

The following new paragraph shall be inserted in Annex S-2 after paragraph 6.7:

6.7A Calculation of Period Profile Class Coefficients for each Time Pattern Regime for Small Scale Third Party Generating Plant where a single SVA Metering Systems measure both Import and Export

In respect of each Settlement Day, each GSP Group "H" and each valid combination of Profile Class "P" and Standard Settlement Configuration "C" for which the Standard Settlement Configuration "C" is identified in the Substitution Table as being for use with SVA Metering Systems that measure both Import and Export from Small Scale Third Party Generating Plant, the SVAA shall determine the Period Profile Class Coefficients ($PPCC_{HPRj}$) for each combination of Time Pattern Regime associated with such Standard Settlement Configuration and such Standard Settlement Configuration "R" as follows:-

$$PPCC_{HPRj} = PPCC_{HP'R'j}$$

Where P' represents the Profile Class identified in the Substitution Table as the one to be used in calculating Period Profile Class Coefficient values for Profile Class "P" and Standard Settlement Configuration and Time Pattern Regime "R".

Where R' represents the Standard Settlement Configuration and Time Pattern Regime identified in the Substitution Table as the ones to be used in calculating Period Profile Class Coefficient values for Profile Class "P" and Standard Settlement Configuration and Time Pattern Regime "R".

Paragraph 8.1.4 of Annex S-2 shall be amended as follows:

8.1.4 For each Half Hourly Consumption (Non Losses) (C_{iNj}) value determined pursuant to paragraph 8.1.3, the SVAA shall determine the Half Hourly Consumption (Losses) ($CLOSS_{iNj}$) for each Supplier BM Unit "i" for Consumption Component Class "N" (which Consumption Component Class shall be a Consumption Component Class for line losses) as follows ~~according to the following formula~~:

(a) if the combination of Profile Class "P" and Standard Settlement Configuration "R" is identified in the Substitution Table as being for use with SVA Metering Systems that measure both Import and Export from Small Scale Third Party Generating Plant, and if the Substitution Table identifies a Line Loss Factor Class L' for use with Profile Class "P", Standard Settlement Configuration and Time Pattern Regime "R" and Line Loss Factor Class "L", then:

$$CLOSS_{iNj} = \Sigma^{(vv)}_{L} ((LLF_{L'j} - 1) * \Sigma^{(vv)}_{PR} BMPC_{iLPRj}); \text{ or}$$

(b) in all other cases:

$$CLOSS_{iNj} = \Sigma^{(vv)}_{L} ((LLF_{Lj} - 1) * \Sigma^{(vv)}_{PR} BMPC_{iLPRj})$$

where "(vv)" is the Consumption Component Class (not for line losses) associated with Consumption Component Class "N" for which a value of $CLOSS_{iNj}$ is to be determined.

ANNEX X-1: General Glossary (version 34.0)

The definition of Metering Point in the General Glossary shall be amended as follows:

"Metering Point": means the point, determined according to the principles and guidance given at schedule 8~~9~~ of the Master Registration Agreement, at which a supply to (export) and/or from (import) a Distribution System:

(i) is or is intended to be measured; or

(ii) where metering equipment has been removed, was or was intended to be measured; or

(iii) in the case of an Unmetered Supply, is deemed to be measured,

where in each case such measurement is for the purposes of ascertaining the Supplier's Settlement liabilities under the Code;

The following new definition shall be inserted in Annex X-1 after the definition of Subsidiary Party:

"Substitution Table": means the table approved by the Panel from time to time in accordance with BSCP509;

ANNEX X-2 – Table X-4 – Use of Subscripts and Superscripts Applying to Section S (version 25.0)

The following new subscript shall be inserted in Table X-4 after the definition of subscript L:

L' refers to Line Loss Factor Class identified in the Substitution Table as being for use in calculating Half Hourly Consumption (Losses) in accordance with paragraph 8.1.4 of Annex S-2 for Profile

Class "P", Standard Settlement Configuration and Time Pattern Regime "R" and Line Loss Factor Class "L";

The following new subscript shall be inserted in Table X-4 after definition of subscript P:

P' refers to the Profile Class identified in the Substitution Table as the one to be used in calculating Period Profile Class Coefficient values in accordance with paragraph 6.7A of Annex S-2 for Profile Class "P" and Standard Settlement Configuration and Time Pattern Regime "R";

The following new subscript shall be inserted in Table X-4 after definition of subscript R:

R' refers to the Standard Settlement Configuration and Time Pattern Regime identified in the Substitution Table as the ones to be used in calculating Period Profile Class Coefficient values in accordance with paragraph 6.7A of Annex S-2 for Profile Class "P" and Standard Settlement Configuration and Time Pattern Regime "R";

MODIFICATION P213

ALTERNATIVE SOLUTION

Section L (version 11.0)
Paragraph 2.2.1 of Section L shall be amended as follows:

2.2.1 The Metering Equipment to be installed:

(a) in the case of a CVA Metering System, shall be Half Hourly Metering Equipment;

(b) in the case of a SVA Metering System which is 100kW Metering System, shall be Half Hourly Metering Equipment;

(c) in the case of a SVA Metering System associated with any Third Party Generating Plant, except in the case of a Small Scale Third Party Generating Plant where the same SVA Metering System measure both Import and Export, shall be Half Hourly Metering Equipment;

(d) in the case of a SVA Metering System other than as provided in paragraph (b) and (c), shall be Half Hourly Metering Equipment or Non-Half Hourly Metering Equipment as the Registrant shall choose; and

(e) in the case of Small Scale Third Party Generating Plant where the Registrant uses Non Half Hourly Metering Equipment for measuring Export, the Registrant shall ensure that the same SVA Metering System (having one MSID) measures both Import and Export.

Annex S-2: Supplier Volume Allocation Rules (version 13.0)

Paragraph 6.6.1 of Annex S-2 shall be amended as follows:

6.6.1 The SVAA shall carry out the determinations set out in this paragraph 6.6 in respect of each Settlement Day "D", each GSP Group "H" and each valid combination of Profile Class "P" and Standard Settlement Configuration "C" for Switched Load Metering Systems, save in the case where the Standard Settlement Configuration "C" is identified in the Substitution Table as being for use with SVA Metering Systems that measure both Import and Export from Small Scale Third Party Generating Plant.

Paragraph 6.7.1 of Annex S-2 shall be amended as follows:

6.7.1 In respect of each Settlement Day, each GSP Group "H" and each valid combination of Profile Class "P" and Standard Settlement Configuration "C", save in the case where the Standard Settlement Configuration "C" is identified in the Substitution Table as being for use with SVA Metering Systems that measure both Import and Export from Small Scale Third Party Generating Plant, the SVAA shall determine the Period Profile Class Coefficients ($PPCC_{HPRj}$) for each combination of Time Pattern Regime associated with such Standard Settlement Configuration and such Standard Settlement Configuration "R" as follows:

The following new paragraph shall be inserted in Annex S-2 after paragraph 6.7:

6.7A Calculation of Period Profile Class Coefficients for each Time Pattern Regime for Small Scale Third Party Generating Plant where a single SVA Metering Systems measure both Import and Export

In respect of each Settlement Day, each GSP Group "H" and each valid combination of Profile Class "P" and Standard Settlement Configuration "C" for which the Standard Settlement Configuration "C" is identified in the Substitution Table as being for use with SVA Metering Systems that measure both Import and Export from Small Scale Third Party Generating Plant, the SVAA shall determine the Period Profile Class Coefficients ($PPCC_{HPRj}$) for each combination of Time Pattern Regime associated with such Standard Settlement Configuration and such Standard Settlement Configuration "R" as follows:-

$$PPCC_{HPRj} = PPCC_{HP'R'j}$$

Where P' represents the Profile Class identified in the Substitution Table as the one to be used in calculating Period Profile Class Coefficient values for Profile Class "P" and Standard Settlement Configuration and Time Pattern Regime "R".

Where R' represents the Standard Settlement Configuration and Time Pattern Regime identified in the Substitution Table as the ones to be used in calculating Period Profile Class Coefficient values for Profile Class "P" and Standard Settlement Configuration and Time Pattern Regime "R".

Paragraph 8.1.4 of Annex S-2 shall be amended as follows:

8.1.5 For each Half Hourly Consumption (Non Losses) (C_{iNj}) value determined pursuant to paragraph 8.1.3, the SVAA shall determine the Half Hourly Consumption (Losses) ($CLOSS_{iNj}$) for each Supplier BM Unit "i" for Consumption Component Class "N" (which Consumption Component Class shall be a Consumption Component Class for line losses) as follows ~~according to the following formula~~:

(a) if the combination of Profile Class "P" and Standard Settlement Configuration "R" is identified in the Substitution Table as being for use with SVA Metering Systems that measure both Import and Export from Small Scale Third Party Generating Plant, and if the Substitution Table identifies a Line Loss Factor Class L' for use with Profile Class "P", Standard Settlement Configuration and Time Pattern Regime "R" and Line Loss Factor Class "L", then:

$$CLOSS_{iNj} = \Sigma^{(vv)}_{L} ((LLF_{L'i} - 1) * \Sigma^{(vv)}_{PR} BMPC_{iLPRj}); \text{ or}$$

(b) in all other cases:

$$CLOSS_{iNj} = \Sigma^{(vv)}_{L} ((LLF_{Lj} - 1) * \Sigma^{(vv)}_{PR} BMPC_{iLPRj})$$

where "(vv)" is the Consumption Component Class (not for line losses) associated with Consumption Component Class "N" for which a value of $CLOSS_{iNj}$ is to be determined.

ANNEX X-1: General Glossary (version 34.0)

The definition of Metering Point in the General Glossary shall be amended as follows:

"Metering Point": means the point, determined according to the principles and guidance given at schedule 8~~9~~ of the Master Registration Agreement, at which a supply to (export) and/or from (import) a Distribution System:

(i) is or is intended to be measured; or

(ii) where metering equipment has been removed, was or was intended to be measured; or

(iii) in the case of an Unmetered Supply, is deemed to be measured,

where in each case such measurement is for the purposes of ascertaining the Supplier's Settlement liabilities under the Code;

The following new definition shall be inserted in Annex X-1 after the definition of Subsidiary Party:

"Substitution Table": means the table approved by the Panel from time to time in accordance with BSCP509;

ANNEX X-2 – Table X-4 – Use of Subscripts and Superscripts Applying to Section S (version 25.0)

The following new subscript shall be inserted in Table X-4 after the definition of subscript L:

L' refers to Line Loss Factor Class identified in the Substitution Table as being for use in calculating Half Hourly Consumption (Losses) in accordance with paragraph 8.1.4 of Annex S-2 for Profile Class "P", Standard Settlement Configuration and Time Pattern Regime "R" and Line Loss Factor Class "L";

The following new subscript shall be inserted in Table X-4 after definition of subscript P:

P' refers to the Profile Class identified in the Substitution Table as the one to be used in calculating Period Profile Class Coefficient values in accordance with paragraph 6.7A of Annex S-2 for Profile Class "P" and Standard Settlement Configuration and Time Pattern Regime "R";

The following new subscript shall be inserted in Table X-4 after definition of subscript R:

R' refers to the Standard Settlement Configuration and Time Pattern Regime identified in the Substitution Table as the ones to be used in calculating Period Profile Class Coefficient values in accordance with paragraph 6.7A of Annex S-2 for Profile Class "P" and Standard Settlement Configuration and Time Pattern Regime "R";

APPENDIX 2: PROCESS FOLLOWED

Copies of all documents referred to in the table below can be found on the BSC Website on the P213 Modification page.

Date	Event
27/04/07	Modification Proposal raised by E.ON UK
10/05/07	IWA presented to the Panel
21/05/07	First Assessment Procedure Modification Group meeting held
01/06/07	Requirements Specification issued for BSC Agent impact assessment
01/06/07	Request for Party/Party Agent impact assessments request issued
01/06/07	Request for Transmission Company analysis issued
01/06/07	Request for BSCCo impact assessment issued
01/06/07	Initial Assessment Procedure Consultation issued
15/06/07	BSC Agent impact assessment response returned
15/06/07	Party/Party Agent impact assessment responses returned
15/06/07	Transmission Company analysis returned
15/06/07	BSCCo impact assessment returned
15/06/07	Initial Assessment Procedure Consultation returned
19/06/07	Second Assessment Procedure Modification Group meeting held
28/06/07	Third Assessment Procedure Modification Group meeting held
04/07/07	Second Assessment Procedure Consultation issued
05/07/07	Second (Central Systems only) Impact Assessment issued
18/07/07	Second Assessment Procedure Consultation returned
19/07/07	Second (Central Systems only) Impact Assessment returned
20/07/07	Fourth Assessment Procedure Modification Group meeting held
09/08/07	Assessment Report presented to the Panel

ESTIMATED COSTS OF PROGRESSING MODIFICATION PROPOSAL[9]

Meeting Cost	£ 2,000
Legal/Expert Cost	£ 0
Impact Assessment Cost	£ 12,000
ELEXON Resource	60 man days £16,260

Impact Assessment

The Impact Assessment costs have increased from those stated in the IWA. A second Impact Assessment was undertaken for both Cap Gemini and Logica, due to an additional system change being noted following the first Impact Assessment.

MODIFICATION GROUP MEMBERSHIP

Member	Organisation	21/05/07	19/06/07	28/06/07	20/07/07
Katie Wilkinson	ELEXON (Chairman)	✓	×	×	×
David Jones	ELEXON (Chairman)	×	✓	✓	✓
Ysanne Hills	ELEXON (Lead Analyst)	✓	✓	✓	✓
Colette Baldwin	(Proposer)	✓	✓	✓	✓
Jonathan Purdy	EDF Energy Networks	✓	✓	✓	✓
Andrew Latham	Centrica	✓	✓	×	✓
Graham Smith	Western Power Distribution	✓	✓	✓	✓
Tim Roberts	Manweb	✓	✓	✓	✓
Richard Harrison	npower	✓	✓	✓	✓
Cher Harris	Scottish and Southern	✓	✓	×	✓
Stephen Johnson	IMServ	×	✓	✓	✓

Attendee	Organisation	21/05/07	19/06/07	28/06/07	20/07/07
Shantok Karvaradra	ELEXON (Lawyer)	✓	✓	✓	✓

[9] Clarification of the meanings of the cost terms in this appendix can be found on the BSC Website at the following link: http://www.elexon.co.uk/documents/Change_and_Implementation/Modifications_Process_-_Related_Documents/Clarification_of_Costs_in_Modification_Procedure_Reports.pdf

Attendee	Organisation	21/05/07	19/06/07	28/06/07	20/07/07
John Lucas	ELEXON (DA)	✓	×	×	✓[10]
Justin Andrews	ELEXON (DA)	×	✓	✓	✓
Yvonne Walsh	ELEXON (Observer)	×	×	×	✓
Nick Rubin	Ofgem	✓	✓	✓	✓
Paula Ollenbuttel	Centrica	✓	✓	×	×
Tom Chevalier	AMO	✓	×	×	×
Jill Ashby	Gemserv	✓	✓	✓	✓
Tony Collings	Scottish and Southern	×	×	✓	×
Howard Halliday	Onstream	×	×	✓	✓
Louisa Stuart-Smith	Npower	×	×	✓	✓

MODIFICATION GROUP TERMS OF REFERENCE

Modification Proposal P213 will be considered by a new Modification Group, the P213 Modification Group, comprised of members of the Volume Allocation Modification Standing Group (VASMG) and members of the Energy Networks Strategy Group (ENSG WP04 P02), in accordance with the following Terms of Reference.

P213 – Facilitating microgeneration (Optional Single MPAN)

ASSESSMENT PROCEDURE

The Modification Group will carry out an Assessment Procedure in respect of Modification Proposal P213 pursuant to section F2.6 of the Balancing and Settlement Code.

The Modification Group will produce an Assessment Report for consideration at the BSC Panel Meeting on 09 August 2007.

The Modification Group shall consider and/or include in the Assessment Report as appropriate:

- **Master Registration Agreement (MRA) Interaction** - any changes proposed to the MRA in this area and their progression. When considering the Implementation Date for P213 the Group will need to consider any related MRA changes and their likely Implementation Date(s).
- **Benefits/Costs of the Single MPAN Solution Proposed -** in terms of the implications for the accuracy of Settlement, possible cost savings/efficiency and the complexity of the proposed solution in comparison to the current baseline.
- **Possible Alternatives to the Settlement Accuracy Solution Proposed in P213** - whether the solution proposed in Annex 2 of P213 is the most appropriate technical and cost effective method of implementing the proposal. Any alternative solutions will need to be assessed in detail.
- **Central System Impacts and Participants System/Process Impacts -** the impact of the P213 solution on Central Settlement systems (particularly the SVAA (Supplier Volume Allocation Agent) and Market Domain Data Management (MDDM) software) and the impact of the proposed Modification on participants' systems and processes.
- **Assessment of the Microgeneration Processes in the Code Subsidiary Documents (CSDs)** – agree whether or not changes are needed to the CSDs to make references to any differences in approach when processes relate to microgeneration. If changes are needed to the CSDs, these will need to be defined at a high level.

[10] Part meeting only.

- **Further BSC Changes (to effect the change) -** any further changes (over and above those described in the Modification Proposal and the IWA) that are needed to allow the use of a single MPAN for microgeneration Import/Export.
- **Government and Other Initiatives** - the impact of any other relevant initiatives, including the Smart Metering Review Group and any further relevant government publications.
- **Areas Raised by the Panel Members at their Meeting on 10 May 2007**:
    - the potential impact on the accuracy of GSP Group Correction Factor of microgeneration sites connected to the Distribution System but where Export is not recorded in Settlement.

APPENDIX 3: SETTLEMENT PROCESSES

A3.1 P213 Scenarios

The following lists the scenarios covering the various combinations of Change of Supplier, number of MPANs and Meters that may arise with P213, in particular where arrangements are being changed between P213 (single MPAN) and P81 (two-MPAN) solutions and vice versa. The Group at its meeting on 28 June discussed each scenario so as to understand the issues surrounding each scenario, determined which are most likely to occur. This section provides supporting text to the scenario diagrams provided in Appendix 3.2. The scenario diagrams are listed in order of most likely to be used in practice. The summary of the Group's discussion are described in sections 3.2.1 and 3.2.2.

The scenarios are listed by change of solution from:

a) P213 solution (1 MPAN) to P81 solution (2 MPANs) with Change of Supplier (CoS);

b) P81 solution to P213 solution with CoS;

c) Metering system changes (not necessarily with CoS); and

d) Other scenarios with no change of number of MPANs.

a) Possible Scenarios (P213-P81)

1. 1 x MPAN, 1 x meter (P213) → 2 x MPAN, 1 x meter (P81)
2. 1 x MPAN, 2 x meters (P213) → 2 x MPAN, 2 x meters (P81)
3. 1 x MPAN, 1 x meter (P213) → 2 x MPAN, 2 x meters (P81)
4. 1 x MPAN, 2 x meters (P213) → 2 x MPAN, 1 x meter (P81)

1. 1 x MPAN, 1 x meter (P213) → 2 x MPAN, 1 x meter (P81)

A single MPAN Import/Export meter is migrated to a shared arrangement, potentially with one Supplier handling the Import and the other handling the Export, or with a new Supplier taking on both (or even one new Supplier taking on the Import and another new Supplier taking on the Export, see scenario 1A). The new Supplier will have to set up a new MPAN and appoint a DC and DA of its choice, however as there is only one meter, they will need to ensure that the same MOA is appointed to both Import and Export MPANs.

2. 1 x MPAN, 2 x meters (P213) → 2 x MPAN, 2 x meters (P81)

Separate Import and Export meters exist under one MPAN, and a different Supplier arrives to take over the Export or both the Import and Export. A new MPAN will have to be established by the incoming Supplier, but that Supplier will then be free to appoint whichever agents it wishes.

3. 1 x MPAN, 1 x meter (P213) → 2 x MPAN, 2 x meters (P81)

A single Import/Export meter under one MPAN is replaced by separate Import and Export meters, which are then also established under two separate MPANs. This would involve an amount of physical meter work by the new MOA. This scenario could come about if the incoming Supplier wants just the Export but for some reason cannot accommodate a single meter, or cannot agree to share it with the existing Supplier.

4. 1 x MPAN, 2 x meters (P213) → 2 x MPAN, 1 x meter (P81)

Two meters under a single MPAN are replaced by a combined meter under two MPANs. This scenarios is believed to occur very infrequently, either as a CoS or a reconfiguration: any incoming Supplier wishing to take on Export would probably prefer to leave the two meters where they are, while if a Supplier intends to replace two meters with a combined meter for their own use, the would probably keep the single MPAN.

b) Possible Scenarios (P81-P213)

5. 2 x MPAN, 1 x meter (P81) → 1 x MPAN, 1 x meter (P213)
6. 2 x MPAN, 2 x meters (P81) → 1 x MPAN, 2 x meters (P213)
7. 2 x MPAN, 2 x meters (P81) →1 x MPAN, 1 x meter (P213)
8. 2 x MPAN, 1 x meter (P81) →1 x MPAN, 2 x meters (P213)

5. 2 x MPAN, 1 x meter (P81) → 1 x MPAN, 1 x meter (P213)

A 2-MPAN single meter setup is reconfigured to a 1-MPAN arrangement, possibly because a Supplier has acquired the Import and Export from one or more Suppliers, or because an existing Supplier wishes to realise the benefits of the P213 single–MPAN solution. Where a CoS is involved, it would be simpler if the incoming Supplier takes on both the MPANs as part of the CoS process, and only carries out the MPAN reconfiguration to a P213 solution once the CoS has been completed. This scenario is shown in the diagram 5. In order to illustrate the additional complexity and issues of the new Supplier only taking on one of the MPANs and the old Supplier being required to disconnect the other (non transferred) MPAN is shown in scenario 5A. After consideration the Group, the Group agreed that the approach in 5A was not to be followed.

6. 2 x MPAN, 2 x meters (P81) → 1 x MPAN, 2 x meters (P213)

This is similar to the previous scenario, where a Supplier may want to have the benefit of a single-MPAN solution but wishes to have two separate meters.

7. 2 x MPAN, 2 x meters (P81) →1 x MPAN, 1 x meter (P213)

A Supplier wishes to take on Import and Export and wants to realise the full benefits of the single-MPAN solution by also installing a single Import/Export meter. As with Scenarios 5 and 6, if a CoS is involved, it will be simpler for the New Supplier to take on both MPANs before reconfiguring the MPANs and removing/replacing meters as necessary. It is more likely that this scenario would come about some time after a Supplier has acquired both Import and Export, once the CoS is over and decides to move to a combined solution.

8. 2 x MPAN, 1 x meter (P81) →1 x MPAN, 2 x meters (P213)

A Supplier may have a single meter by two MPANs, and wants to realise the benefit of the P123 solution, but then wants separate meters. This doesn't seem a very likely scenario – if a CoS is involved and a combined Import/Export meter is present, an incoming Supplier would be more likely to take on the meter rather than replace it with separate meters.

c) Changes to Metering System *not* involving P213-P81 change

Under these scenarios, there is no change in the number of MPANs, but there may be changes in the metering arrangements.

9. 1 x MPAN, 1 x Meter → 1 x MPAN, 2 x meters

This scenario can could occur as a reconfiguration by a Supplier, potentially after a CoS but not necessarily coincident with it. It may be that a Supplier cannot accommodate a single Import/Export meter and wants to replace it with 2 separate meters.

10. 1 x MPAN, 2 x meter → 1 x MPAN, 1 x meter

This is the reverse of scenario 9 above, and is more likely: it would be where a Supplier chooses to replace two separate meters with a single Import/Export meter.

11. 2 x MPAN, 1 x Meter → 2 x MPAN, 2 meters

This is a P81 setup, where either a Supplier has both MPANs, or there are separate Suppliers for Import and Export, but a single Import/Export meter is in use. The main reason for moving from one meter to two meters, assuming the Supplier(s) are happy with the current arrangement, would be as a precursor to a Change of Supplier and where it is believed that the new Supplier will not be able to accommodate the single meter. However, as there are already two MPANs in place, any necessary meter replacement/reconfiguration should be able to take place after the CoS has been completed.

12. 2 x MPAN, 2 meters → 2 x MPAN, 1 meter

This is a variation of Scenario 10, where there could be one or two Suppliers who decide to replace two separate meters with a single Import/Export meter. However, because there are two MPANs, this could also come about as a result of a CoS, e.g. if an Import Supplier acquires the Export and then decides to upgrade the metering to a single meter.

d) Other Combinations

Where there is no change in the number of MPANs or number of Meters, the change could be a straight CoS. If there are initially two MPANs, the current P81 rules would be followed, and could involve different Suppliers acquiring the Import and Export. If there is one MPAN, the incoming Supplier may follow up the CoS activity by deciding to remove or add Export as necessary.

The combinations this includes are:

13. 1 x MPAN, 1 x meter → 1 x MPAN, 1 x meter
14. 1 x MPAN, 2 x meter → 1 x MPAN, 2 x meter
15. 2 x MPAN, 1 x meter → 2 x MPAN, 1 x meter
16. 2 x MPAN, 2 x meter → 2 x MPAN, 2 x meter

Key to diagrams:
The diagrams show three streams; the main process steps in the centre; the key issues on the right and indication of either new or existing process on the left of the page. Significant issues are shown in red. DTC flows are shown in green.

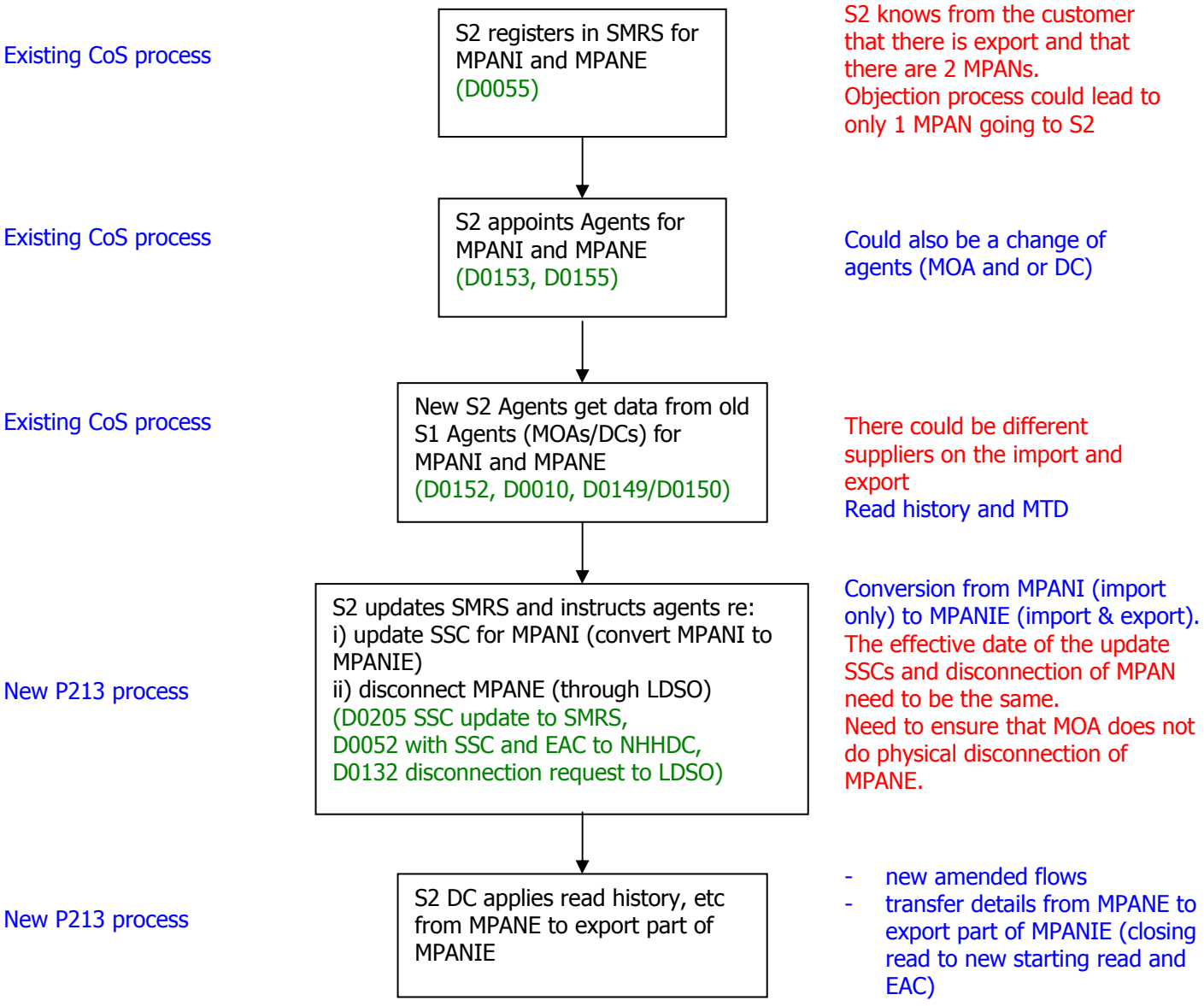
Terms:

MPANI	= import only MPAN
MPANE	= export only MPAN
MPANIE	= import/export MPAN
S1	= Old Supplier
S2	= New Supplier
MOA	= Meter Operator Agent
DC	= Data Collector
SMRS	= Supplier Meter Registration Service

Key Assumptions:
1. For a Change of Supplier process, it is assumed that the new Supplier will register both MPANs (if it is currently in a P81 two MPAN set up) before converting to a single MPAN (P213 solution);
2. The customer will be able to facilitate the Change of Supplier process by providing sufficient information to the old and new Suppliers to allow the correct change in registration for the relevant MPAN(s).
3. It is recognised that new manual processes will need to be developed by the Supplier and its agents to support P213 solution.

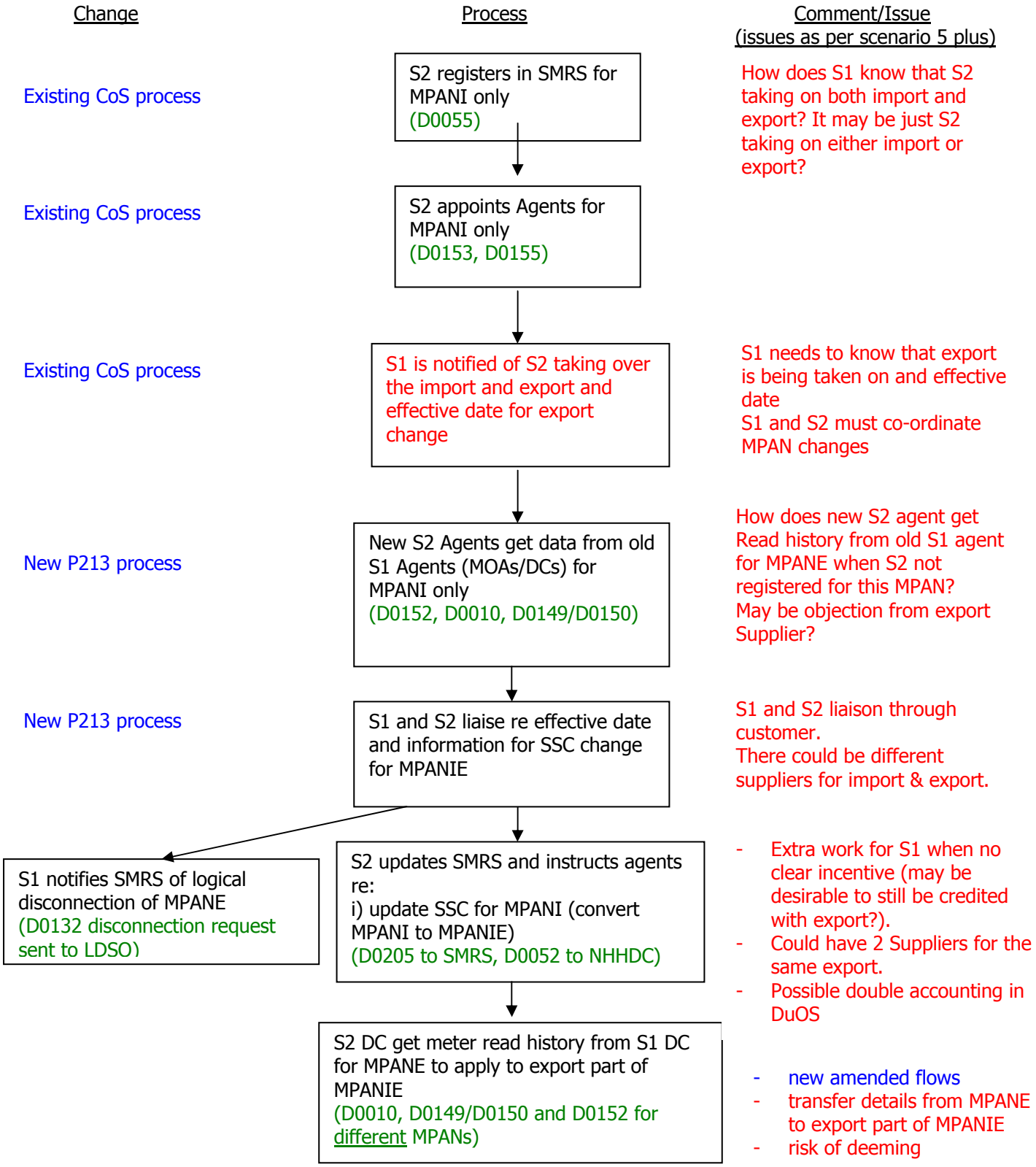
A3.2 Scenario Diagrams

Scenario 5 P81 to P213 (where S2 is responsible for the disconnection of MPANE)
2 MPANs to 1 MPAN (1 meter)
Change of Supplier (CoS: Old Supplier S1; New Supplier S2 taking on both Import and Export)



Other relevant scenarios:
6) 2 Meters to 2 Meters: This is believed to be the more likely scenario and may involve different agents for import and export and the new Suppliers agents speak to 2 sets of different agents
7) 2 Meters to 1 Meter: Physical work by MOA and removal of one meter process
8) 1 Meter to 2 Meters: Physical work by MOA and extra meter details process

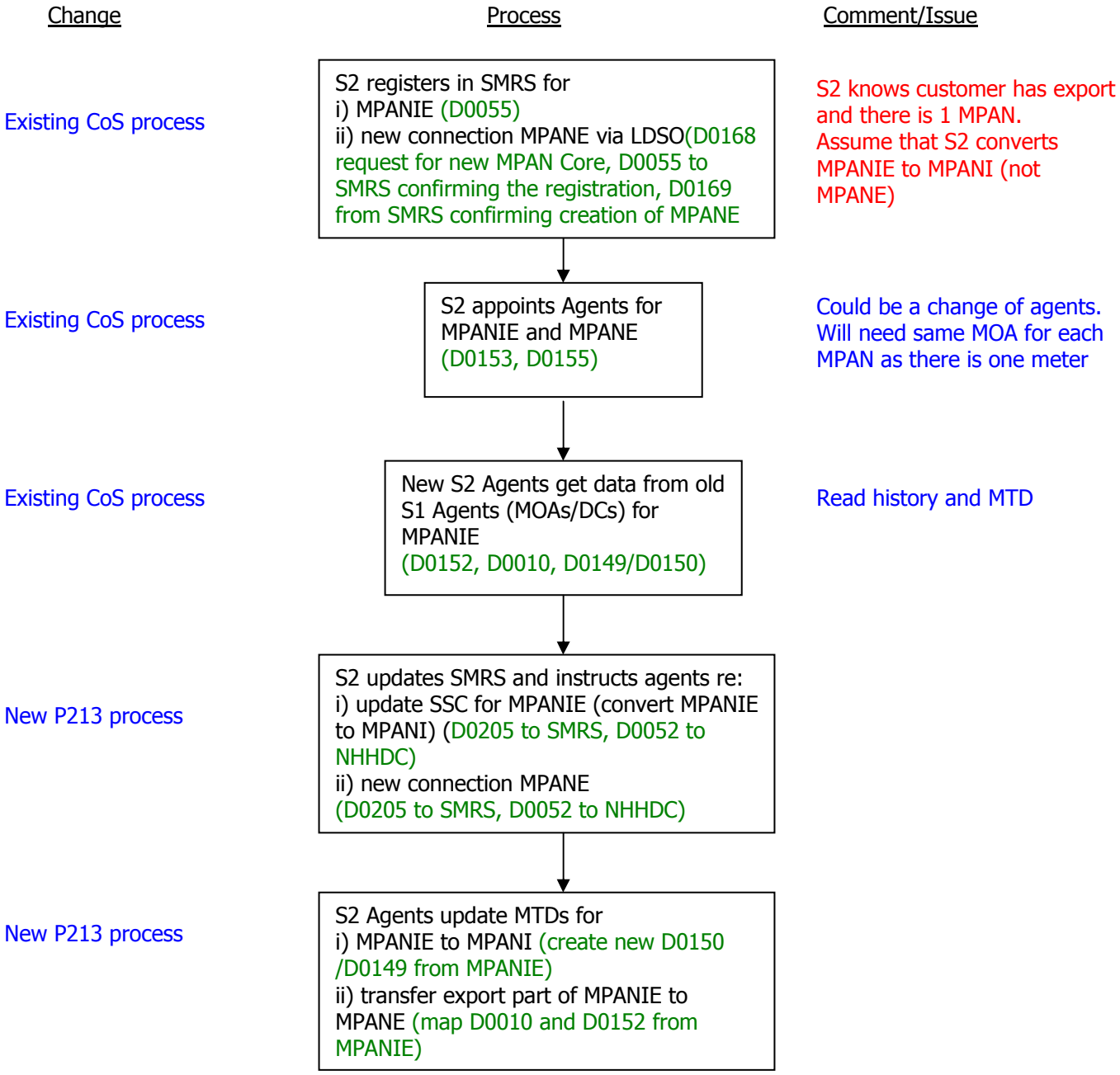
Scenario 5A P81 to P213 (where S1 is responsible for the disconnection of MPANE)
S2 takes Import and Export but registers 1 MPAN only (MPANI)
2 MPANs to 1 MPAN (1 meter)
Change of Supplier (CoS: Old Supplier S1; New Supplier S2)



Other relevant Scenarios:
6A) 2 Meters to 2 Meters: This is believed to be the more likely scenario and may involve different agents for import and export and the new Suppliers agents speak to 2 sets of different agents
7A) 2 Meters to 1 Meter: S1's MOA removes MPANE meter; S2's MOA changes MPANI meter
8A) 1 Meter to 2 Meters: S2's MOA changes meter and extra meter details process

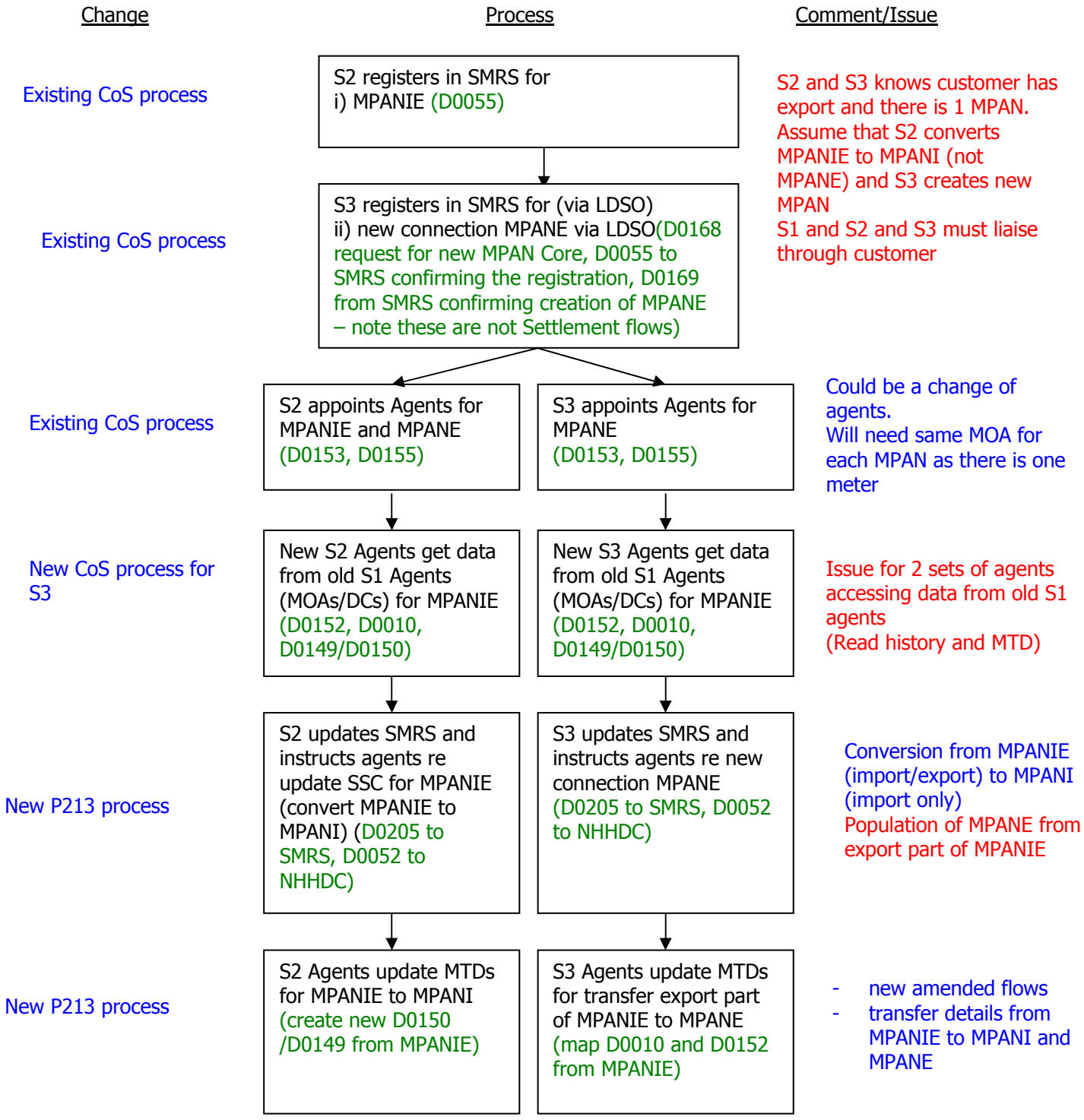
Scenario 1

P213 to P81
1 MPAN to 2 MPANs (1 meter)
Change of Supplier (CoS: Old Supplier S1; New Supplier S2)



Other relevant Scenarios:
2) 2 Meters to 2 Meters: could have different MOAs (and therefore a problem for transfer of Meter technical details)
3) 1 Meter to 2 Meters: S2 agents: Physical work by MOA and extra meter details process
4) 2 Meters to 1 Meter: S2 agents: Physical work by MOA and removal of one meter process

Scenario 1A **P213 to P81**
1 MPAN to 2 MPANs (1 meter)
Change of Supplier (CoS: Old Supplier S1 (with both Import and Export) to two New Suppliers; S2 for Import and S3 for Export)



Other relevant Scenarios:
2) 2 Meters to 2 Meters: could have different MOAs (and therefore a problem for transfer of Meter technical details)
3) 1 Meter to 2 Meters: S2 agents: Physical work by MOA and extra meter details process
4) 2 Meters to 1 Meter: S2 agents: Physical work by MOA and removal of one meter process

Scenario 13A **No Export to P213**
1 MPAN to 1 MPAN (1 meter)
Change of Supplier (CoS: Old Supplier S1; New Supplier S2)

Change	Process	Comment/Issue
Existing CoS process	S2 registers in SMRS for MPANI (D0055)	
Existing CoS process	S2 appoints Agents for MPANI (D0153, D0155)	Could be change of agents
Existing CoS process	New S2 Agents get data from old S1 Agents (MOAs/DCs) for MPANI (D0010, D0152, D0149/D0150)	Read history and MTD
New P213 process	S2 updates SMRS and instructs agents re: i) update SSC for MPANI (convert MPANI to MPANIE) (D0205, D0052) ii) new meter required? (D0142 to replacing an existing Import meter, D0150 with revised MTD)	

No meter issues for CoS.
Potential issues when convert a MPANI to MPANIE

Scenario 13B **P213 to no Export**
1 MPAN to 1 MPAN (1 meter)
Change of Supplier (CoS: Old Supplier S1; New Supplier S2)

Change	Process	Comment/Issue
Existing CoS process	S2 registers in SMRS for MPANIE (D0055)	
Existing CoS process	S2 appoints Agents for MPANIE (D0153, D0155)	Could be change of agents
Existing CoS process	New S2 Agents get data from old S1 Agents (MOAs/DCs) for MPANIE (D0010, D0152, D0249/D0150)	Read history and MTD
New P213 process	S2 updates SMRS and instructs agents re: i) update SSC for MPANIE (convert MPANIE to MPANI) (D0205, D0052) ii) new meter required/changed configuration? (D0142 requesting metering change or reconfiguration, followed by D0150 confirming change)	

There may be ongoing problems for MOA/DC with redundant registers. Agents need to be aware of registers not used for Settlement purposes.
They may be issues for Old Supplier closing off export readings.

APPENDIX 4: CHANGES REQUIRED TO MDDM AND SVAA SOFTWARE

This Appendix is intended to provide further detail on the changes required to the SVAA and MDDM software, expanding on the overview given in section 2.2 of the document. It was aimed primarily at the developers of the SVAA and MDDM systems, as the basis for their impact assessments, and is structured as follows:

- Section A4.1 describes the core changes required to SVAA and MDDM;
- Section A4.2 describes the additional changes required to update the MDD D0269 and D0270 data flows; and
- Section A4.3 describes the additional changes required to include LLFCs in the Substitution Table.

A4.1 – Core Changes to SVAA and MDDM Software

The following changes are required for the core changes.

A4.1.1 - Extension to Valid Set of SSC Type

Currently, the valid set of the 'Standard Settlement Configuration Type' data item is defined as follows:

I Import
E Export

P213 requires a third value to be added to the valid set, for Import/Export SSCs:

X Import/Export

This change to the valid set potentially affects both the MDDM system (which stores SSC data) and the SVAA application (which loads it for use in calculating profile coefficients). MDDM must permit an 'X' value to be stored and published (on the D00269 version 003, D0270 version 003 and D0278 version 002 data flows), and SVAA must allow it to be loaded into the for Standard Settlement Configuration table.

A4.1.2 – New Import/Export Flag Held Against Measurement Requirement

For Import/Export SSCs, a new flag will be required at the TPR level (i.e. on the Measurement Requirement entity), to indicate which registers are Import and which register is Export. This new data item will be referred to as the 'Import/Export Register Type', and will be added to the Measurement Requirement entity in both the SVAA and MDDM applications. It will always be null for SSCs with a Standard Settlement Configuration Type of 'I' or 'E', but for SSCs with a Standard Settlement Configuration Type of 'X' it must be set to one of the following values:

I Import
E Export

In addition to being added to the MDDM and SVAA systems, this new attribute of Measurement Requirement will be added to the TPR record of the D0278 file, so that it can be automatically loaded into SVAA.

Changes to other MDD flows are described in section A4.2 below.

A4.1.3 - SVAA to Hold Substitution Table

In order to calculate profile coefficients for Import/Export SSCs, SVAA must hold a table of Substitution Table. The logical entity description for this data is as follows:

Entity: Profile Coefficient Substitution Instruction

Description: An instruction (approved by SVG on behalf of the BSC Panel) to use Period Profile Class Coefficients for one Valid Measurement Requirement Class (the 'substitute' VMRPC) in place of

another VMRPC (the 'registered' VMRPC). SVG will provide an instruction of this type in order to allow Metering Systems to be registered to an SSC for which profile coefficient cannot be calculated using the normal profiling rules e.g. an Import/Export SSC.

Attributes:

Registered Profile Class Id (Prime Foreign)
Registered Standard Settlement Configuration Id (Prime Foreign)
Registered Time Pattern Regime Id (Prime Foreign)
Effective From Settlement Date {PCSI} (Prime)
Substitute Profile Class Id (Foreign)
Substitute Standard Settlement Configuration Id (Foreign)
Substitute Time Pattern Regime Id (Foreign)
Effective To Settlement Date {PCSI}

Note that the mechanism for loading this data into SVAA is described in section A4.2 below.

A4.1.4 - SVAA to Use Substitution Table in Calculation of Profile Coefficients

SVAA is required to use the data in the Substitution Table when constructing Period Profile Class Coefficients for Import/Export SSCs (i.e. any SSC with a Standard Settlement Configuration Type of 'X'). Rather than applying the normal rules to construct PPCC data for each TPR, SVAA will 'copy' the PPCC data from the substitute VMRPC identified in the Substitution Table.

For example, P213 gives the following example of a Substitution Table:

EXAMPLE SUBSTITUTION TABLE FOR USE BY SVAA IN PROFILING IMPORT/EXPORT SSCs					
IMPORT/EXPORT SSC			SUBSTITUTE SSC		
Profile Class	SSC	TPR	Profile Class	SSC	TPR
1	0666	00001	1	0393	00001
1	0666	00378	8	0482	00378

With this data in the table, Period Profile Class Coefficients for SSC 0666, Profile Class 1 and TPR 00378 would (for all relevant GSP Groups) be copied from SSC 0482, Profile Class 8 and TPR 00378 (for the same GSP Group).

Import/Export SSCs could be excluded from the Daily Profile Production Run entirely (so that the idf_pd_pfl_class_coefs table remains unpopulated for these SSCs). In this case, the logic for choosing substitute PPCC values would have to be replicated in each part of the software that uses PPCC data (e.g. the SSR Run, the DPC report to Data Collectors, and the Profile reports to Suppliers).

A4.1.5 - SVAA to Assign Import/Export Energy to Correct Consumption Component Class

Currently, SVAA uses the Standard Settlement Configuration Type (held against the SSC) to determine whether a profiled EAC/AA value should be assigned to an Import CCC or an Export CCC. For Import/Export SSCs only (i.e. those with a Standard Settlement Configuration Type of 'X'), P213 requires the new Import/Export Register Type flag (held on the Measurement Requirement entity) to be used to allocate energy to the appropriate CCC at the TPR level.

A4.2 – Additional Changes for Publication of Substitution Table

Section A4.1 above has described the core functionality needed to implement P213 in SVAA and MDDM. This section A4.2 describes the additional system changes necessary to publish to industry details of the Substitution Table and Import/Export Register Type flag.

OPTION REFERENCE	ADDITIONAL IMPACT ON MDDM SOFTWARE AND DATA FLOWS	ADDITIONAL IMPACT ON SVAA SOFTWARE
Option (b)i [11]	New entity required to hold Substitution Table data. Substitution Table data added to D0278 data flow for transmission to SVAA. Substitution Table data and Import/Export Register Type Flag also reported to Suppliers via the D0269 and D0270 data flows.	D0278 MDD load amended to include load of Substitution Table data. Manual data entry screen required as backup data load mechanism.

A4.3 – Additional Changes to include LLFCs in the Substitution Table

As described in section 2.2.4 of the document, current Proposed Modification makes use of the Substitution Table to select substitute Line Loss Factors, as well as substitute Profile Coefficients.

A4.3.1 – Extending the Substitution Table to Include LLFCs

To extend the Substitution Table to include LLFC data, the Profile Coefficient Substitution Instruction entity (defined in A4.1.3 above) would remain unchanged, but it would also have a child entity, specifying substitutions of LLFC:

Entity: LLFC Substitution Instruction

Description: An instruction from an LDSO to use a substitute LLFC in place of the registered LLFC for one or more TPRs of an Import/Export SSC.

Attributes:

Registered Profile Class Id (Prime Foreign)
Registered Standard Settlement Configuration Id (Prime Foreign)
Registered Time Pattern Regime Id (Prime Foreign)
Distributor Market Participant Id (Prime Foreign)
Distributor Market Participant Role Code (Prime Foreign)
Registered Line Loss Factor Class Id (Prime Foreign)
Effective From Settlement Date {PCSI} (Prime Foreign)
Effective From Settlement Date {LLFCSI} (Prime)
Substitute Line Loss Factor Class Id (Foreign)
Effective To Settlement Date {LLFCSI}

This additional entity would be required to be held in the SVAA system and the MDDM system and MDD data flows. The SVAA screen for manual loading of Substitution Table data would also have to support this new entity.

The SSR component of SVAA would require amendment to refer to the Substitution Table when selecting the appropriate Line Loss Factors to use for each TPR of an Import/Export SSC.

A4.3.2 – Additional Change to DUoS Reporting

The D0030 report should be amended to report the substitute details for an SPM cell, not the registered details. In other words, the SVAA system would populate the VMR record of the D0030 report as follows:

- The Profile Class Id, Standard Settlement Configuration Id and Time Pattern Regime Id would be the Substitute Profile Class Id, Substitute Standard Settlement Configuration Id and Substitute Time Pattern Regime Id (if there is a relevant Profile Coefficient Substitution Instruction row); otherwise the registered values provided by the NHHDA; and

[11] This reference relates to the options set out in the P213 Requirements Specification.

- The Line Loss Factor Class Id would be the Substitute Line Loss Factor Class Id (if there is a relevant LLFC Substitution Instruction row); otherwise the registered value provided by the NHHDA.

Note that this process of 'relabelling' DUoS report data in accordance with the Substitution Table may require two or more different SPM cells to be aggregated for purposes of DUoS reporting. For example, suppose that the SPM data for a given Supplier and GSP Group contains both:

- Aggregated Export data for P81-registered 'two MPAN' microgenerators (SSC 0482, PC 8, TPR 00378, LLFC 203); and
- Aggregated Export data for P213-registered 'single MPAN' microgenerators (SSC 0666, PC 1, TPR 00378, LLFC 103) which is to be 'relabelled' (as per the example Substitution Table in A1.4 above) to SSC 0482, PC 8, TPR 0378, LLFC 203

After relabelling, these two sets of data relate to exactly the same Supplier, GSP Group, SSC, PC TPR and LLFC. The data must therefore be summed to create a single aggregate row in the DUoS file (rather than left as two 'duplicate' rows).

A4.3.3 – Additional Change to Supplier Reporting

The 'relabelling' of SPM output described in A4.3.2 should also extend to the SPM (D0082) Report, well as the DUoS report.

APPENDIX 5: COMBINED RESULTS OF THE IMPACT ASSESSMENTS

During the Assessment Procedure an impact assessment was undertaken in respect of all BSC systems, processes, documentation and parties. The following have been identified as impacted by P213.

For details of the costs associated with these impacts, please refer to Section 3.

a) Impact on BSC Systems and Processes

System / Process	Impact of Proposed/Alternative Modification
SVAA Software	Changes would be required to the SVAA software as described in section 2.3 to allow profiling for Import and Export on a single MPAN, and to allow energy to be attributed to 2 registers at the same point in time.
MDD Software	Changes would be required to recognise an Import/Export MPAN within MDD and to allow individual registers to be flagged as Import or Export. MDD flows may also need to be updated to contain this information depending on the option chosen.
Profile Administrator Agent	No impact.

Copies of the full BSC Agent impact assessments are available on the ELEXON website.

b) Impact on BSC Agent Contractual Arrangements

Impact assessment by the BSC Agents impacted by this change has not shown any impact on the contractual arrangements.

c) Impact on BSC Parties and Party Agents

A summary of the Impact on BSC Parties and Party Agents is included in section 3.11.3. Full copies of the Party and Party Agent impact assessment responses are in Appendix 9.

d) Impact on Transmission Company

No Impact.

e) Impact on BSCCo

Area of Business	Impact of Proposed/Alternative Modification
Implementation	ELEXON will be required to implement changes to the Code, CSDs and BSC Systems to support this Modification Proposal.
MDD	There may be a minor impact on the Customer Operations Team, due to the impact on Market Domain Data.

f) Impact on Code

Code Section	Impact of Proposed/Alternative Modification
Section L (Metering)	Alternative Modification only: Changes required to the definition of Metering Equipment for a SVA Metering System with Small Scale Third Party Generating Plant just to allow one MSID which measures

Code Section	Impact of Proposed/Alternative Modification
	both Active Import and Active Export
Annex S-2 (Supplier Volume Allocation)	There would be changes needed to profiling in Annex S-2 to introduce a new sub section. The description of application of losses would need to be amended to account for the different losses for the Import and Export on the same MPAN. Changes may be needed for other processes set out in Section S.
Annex X-1 and Annex X-2	To provide definitions for new terms introduced into section S-2.

A copy of the draft legal text to give effect to these changes can be found in Appendix 1.

g) Impact on Code Subsidiary Documents

Document	Impact of Proposed/Alternative Modification
BSCP501 (Supplier Meter Administration Service)	Changes will be needed to describe the registration process for Import/Export MPANs. The Group envisage that new interface and timetable sections will be developed for this (as opposed to updating the existing sections to set out the new processes).
BSCP504 (Non Half Hourly Data Collection for SVA Metering Systems Registered in SMRS)	The obligation on Suppliers to register Import and Export MPANs separately will need to be updated. Change will be needed to describe some new processes for Import/Export MPANs (e.g. Change of Supplier). The Group envisage that new interface and timetable sections will be developed for this (as opposed to updating the existing sections to set out the new processes). The Group have reviewed the Validation Rules and agreed that no changes are needed.
BSCP508 (Supplier Volume Allocation Agent)	Changes are needed to describe the use of the Substitution Table by SVAA and how the table is updated.
BSCP509 (Changes to Market Domain Data)	Changes are needed to set out the detailed process for updating the Substitution Table.
BSCP514 (SVA Meter Operation for SVA Metering Systems Registered in SMRS)	Changes will be required to set out how Meter Operators should manage requests relating to Import/Export Meters (e.g. reconfiguration requests). The Group envisage that new interface and timetable sections will be developed for this (as opposed to updating the existing sections to set out the new processes).
BSCP516 (Allocation of Profile Classes and SSCs for NHH SVA Metering Systems Registered in SMRS)	Minor changes will be needed to the rules for allocating SSCs to allow for Import/Export SSCs.
SVA Data Catalogue	P flows may need to be amended. Any changes to D-flows will affect DTC although, some notes may need to be added to the SVA DCs.

h) Impact on Core Industry Documents/System Operator-Transmission Owner Code

Document	Impact of Proposed/Alternative Modification
Master Registration Agreement	P213 notes that an amendment to Schedule 8 of the MRA is required to give effect to the changes suggested in the Modification Proposal.

Document	Impact of Proposed/Alternative Modification
	A change to Part 1 of the MRA may also be required to revise the principles and definitions of Metering Points to reflect the single MPAN arrangements proposed in P213. Data Transfer Catalogue (DTC) - changes will be required to the D0269 'Market Domain Data Complete Set', D0270 'Market Domain Data Incremental Set'. Any changes needed to the MRA, to allow the use of a single MPAN would be processed through the normal MRA change process.

i) Impact on Other Configurable Items

Document	Impact of Proposed/Alternative Modification
ELEXON BPM	Changes may be needed to reflect the modified processes.
SVAA URS	Changes would be required to the SVAA software (and supporting documentation) to allow the use of more than one PC and TPR for a single MPAN at any given time. The extent of the changes required will be dependent on the solution chosen.
SVAA SD	Changes would be required to the SVAA software (and supporting documentation) to allow the use of more than one PC and TPR for a single MPAN at any given time. The extent of the changes required will be dependent on the solution chosen.

j) Impact on BSCCo Memorandum and Articles of Association

No impact.

k) Impact on Governance and Regulatory Framework

No impact.

APPENDIX 6: RESULTS OF INITIAL ASSESSMENT PROCEDURE CONSULTATION

14 responses (representing 56 Parties and 18 non-Parties) were received to the P213 Assessment Procedure consultation.

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

Q	Consultation question	Yes	No	Neutral	Comments
1	Do you have any NHH Export sites?	8 respondents (31 Parties + 7 non Parties)	3 respondents (14 Parties + 3 non Parties)	3 respondents (11 Parties + 8 non Parties)	1) A handful, most of our micro-generators are not registered in settlements for export. 2) We have a limited number of NHH Export sites for which we are registered as MO but we have none for which we are appointed as DC. 3) Inherited one site with import/export metering on a Change of Supplier event, which only came to light by checking our settlement information rather than by design.
1a	If yes to question 1, how many NHH Export sites do you have and how much energy do these individual sites Export (e.g. kWhs per year)?	1) We only register sites with an export capacity > 10kW where a significant majority is exported rather than used on site. 2) We have around 200 customers on our small generators product. 3) We have a very small number of import customers that also have an export capability. We have, at present not traded any within the settlement arrangements.			
2	Do you use the current arrangements (introduced by P081) to register Export MPANs in Settlement?	2 respondents (6 Parties + 0 non Parties)	5 respondents (39 Parties + 3 non Parties)	7 respondents (11 Parties + 15 non Parties)	-
2a	If yes to question 2, how easy do you find the current process to use? Please explain any problems	1) The process itself is the same as any CoS or new connection. The fact that it is export is irrelevant. 2) We do not have any problems with the current process.			

Q	Consultation question	Yes	No	Neutral	Comments
	that you consider to exist with the current process.				
2b	Of no to question 2, why don't you use these processes?				1) The current processes are complex and the associated value is small. They require manual intervention which is not sustainable on a long term basis. 2) MPAN based charges (double); Problems getting additional MPANs from DNOs; 3) Given the current small size of the domestic micro-generation market it has not yet been possible to make a business case for the system changes to support a full P81 solution. 4) Currently we have not had customers requesting the use of Micro generation. However as you would expect we have had many customer enquiries around how to go about the use of Micro generation. 5) Solely because we have not traded any NHH export energy within the Settlement arrangements. We do not use any other method. 6) We need to make changes to our customer management and billing systems to recognise export and reward the customer.
2c	If no to question 2, as a Supplier, how do you treat your NHH Export sites (e.g. do you pay a fixed reward to customers with microgeneration, or do you use readings provided by the customer using their own metering)?				1) Nearly all our sites are paid for total generation using CoR of generation meters. 2) Either a fixed reward per annum or variable based on meter readings. 3) Fixed sum or based on metered generation or non-Settlement export meter. 4) We have not had any customers however we would still use our Data collector to confirm readings or in the future the use of Smart Metering technology may also be utilised. 5) Whatever we do in terms of an offering to our customers is out with the scope of the BSC. We should not fall into a trap of devising a means of trading NHH export within Settlements as a function of how we bill them. 6) 168 – non settlement meters registering an average of 1111 Kwh/annum 215 – sites were excess generation is spilled and deemed (value of export not calculated)

Q	Consultation question	Yes	No	Neutral	Comments
		The remainder of our NHH Export customers are managed in two ways – some customers have non-fiscal export meters which we use to monitor the energy exported and reward the customer with a ex-gratia payment on a pence per/kwh basis. The remainder of the customers who don't have metering are PV customers – we have a macro which works on deeming an estimated level of export based on house type & occupation levels, location, size of PV array, time of year. We round this estimate up to the nearest £5.00			

Q	Consultation question	Yes	No	Neutral	Comments
3	If it was possible to register Import and Export under a single MPAN for microgeneration sites (as suggested by P213), would you start to record NHH Export in Settlement?	4 respondents (14 Parties + 3 non Parties)	2 respondents (7 Parties + 1 non Parties)	8 respondents (35 Parties + 14 non Parties)	1) Unlikely. While a significant step forward, we still believe paying Customers for total Generation offers better value. 2) To maintain the accuracy of Settlement, we are of the opinion that NHH Export should always be recorded in Settlement. We are of the view that the ability to register using 1 instead of 2 MPANs should not have an impact on this. 3) Until the solution is defined in more detail it is not possible to confirm whether we would start to record NHH Export in Settlement. If the solution delivered is one which can be easily accommodated by supplier systems and processes it is more likely that we would begin to follow this process. 4) This depends on the business case when the solution is fully defined and assessed. It would be worthwhile recovering the benefits through Settlement if the volumes were large enough to cover the costs of the systems development. 5) We would support the use of registering a single MPAN under P213. It would be logical to use this information for settlement but again we would need to understand the impact: • Cost on our systems • Cost for enhancements to Agents systems • and Elexons Costs for potential central system changes 6) Scottish Power is supportive of the principle of trading both import and export on a single MPAN. This would reduce the likelihood of data inconsistencies and erroneous transfers, while simultaneously improving the clarity and quality of service to the customer. However as it presently stands P213 is not acceptable to Scottish

Q	Consultation question	Yes	No	Neutral	Comments
					Power and cannot be supported. As it presently stands the Mod would introduce an unacceptably high level of error into Settlements. However, this should only be implemented where the quality of data within Settlements can be assured. Scottish Power would like the group to explain how we would overcome the issues of data quality, LLF's and Profiling. Scottish Power has concerns on the ability of market participants to introduce significant amounts of error into Settlements without first being properly validated. The obligations in validating Import/Export metered consumption needs to be clearly defined on the basis of some robust analysis. There already exists a lack of consistency over the methodology used to calculate LLF's and this again would need to be reviewed as microgeneration proliferates. Much of the electricity produced in this way will not travel great distances and without any review the level of recorded losses in any GSP could be erroneous reduced. As such we would want a guarantee that LLF's for microgeneration sites would be reviewed and that they would only apply to the import register, if at all. Given the entirely variable nature of the elements required for microgeneration Scottish Power cannot comprehend any acceptable way of profiling the import or export usage for these sites. Before Scottish Power could accept P213 the Mod Group must demonstrate how the quality of data in Settlements would not be detrimentally affected by profiling. 7) The consumption between export readings would be calculated and sent on the corresponding D19. However if we add the export value to the import value the settlement performance would not be accurate. If there is the possibility Nett the export and import values this would provide more accurate settlement data.

Q	Consultation question	Yes	No	Neutral	Comments
					8) We would wish to maximise the value that could be attributed to the energy exported from the unit. We believe this solution would reduce our customer service costs (including MPAN acquisition, registration and set up costs, together with the ongoing costs associated with managing a second MPAN), our agent costs, our billing costs and when coupled with other services would offer a full customer solution that would encourage customer retention.

Q	Consultation question	Yes	No	Neutral	Comments
3a	If yes, why would you use P213 opposed to the current processes?				1) Centrica believes it has to be simple for a customer to use Micro generation and utilising one meter as apposed to two meters makes it easier for customers. 2) As per the comments above Scottish Power would not use P213 as it presently stands but would utilise a single MPAN option if we were satisfied that the quality of data within settlements would not be detrimentally affected. 3) There is only 1 MPAN to maintain, reading and settlement data is all in one place without the need for cross referencing. 4) Based on 2 main factors: • Energy value of single MPAN solution not eroded by management costs • Removing the potential difficulties which surround the change of supplier/tenancy and agent processes – stranded MPANs, inadvertent breach of contract, metering problems, DNO requirements and potential double reward
3b	If no, why wouldn't you use these processes?				1) In Carbon terms we need to encourage customers to use the energy on site. Exporting is 2nd best. It is our policy to reward Customer for Generation rather than export. 2) Existing process is fit for purpose and cost justified. There is no need to develop another process to carry out the same task.
4	As a Supplier, how much would the costs of administering each NHH Import and Export sites be reduced by P213?				1) It would still be more expensive than our current policy of paying on total generation, and provide less income to customers. 2) In terms of 'business as usual' administration, the cost differential would be minimal between existing P81 and proposed P213. We are yet to be convinced that there is a tangible benefit to the customer if the new P213 process is implemented. Indeed the high cost of implementation in the short term could possibly have a negative impact on export reward. 3) This is unclear as P213 has not developed sufficient detail to allow such a comparison to take place. In terms of cost / benefit the key areas the modification group should be seeking address are: • Reducing process complexity • Interoperability

Q	Consultation question	Yes	No	Neutral	Comments
		• Impact on the Change of Supplier Process 4) We are not in a position to answer this at present, because we do not believe existing charges are fully cost-reflective. Basic charges are per MPAN, but these might increase for import/export MPANs. Some transactional charges are by site visit. Meter Operator practice seems to be to install a separate meter for the exports, which must entail additional costs. It is not clear if this would change for P213. 4) With an impact assessment of 2 weeks this is almost impossible to clarify and further time would be required. We have already identified areas that would be affected including pricing structures, changes to customer contracts, changes to bills, changes to IT infrastructure, training and development of front line staff, changes to DA, DC and MO contracts and data provisions. All of the above need further evaluation to give costs and we are not currently in that position. 5) Scottish Power advises the Mod group not to use cost as a driver for this change. It is highly dubious that an accurate cost benefit analysis could be presented to the industry while the numbers it would be based on would render any such analysis as inappropriate. However we have enough experience of customer types with two MPANs on the same premises that demonstrate a greater level of cost and data inconsistencies than single MPAN set-ups. Despite this, as the Mod presently stands the net outcome could well be more costly as we would have to account for the increased likelihood of error within settlements, the management and controls of this error and the movement in losses and Group Correction Factor. 6) Registration and customer management cost of a separate MPAN would be removed and we would see this as an additional line on a customers record. We would remove the costs to acquire, costs to serve and cost to defect for the second MPAN. Metering costs would be based (in the case of a combined import/export meter) on the multi-register rate rather than two separate systems. Distribution costs per MPAN would be removed for the export element.			
5	As a Meter Operator Agent, have you installed any NHH Export	3 respondents (11 Parties +	3 respondents (0 Parties + 7	8 respondents (45 Parties + 7	1) Yes, we have installed meters for customers on a chargeable basis. The majority of customers on this product have paid for their

Q	Consultation question	Yes	No	Neutral	Comments
	metering paid for by the customer?	7 non Parties)	non Parties)	non Parties)	export metering solution. 2) It is not clear whom you are referring to when you state 'customer'. We have not provided metering on a commercial basis to domestic customers, however we have provided such meters to Suppliers on request.
5a	If yes, how many Export meters have you installed and are the meters of a standard that could be used in settlement (if they were registered to a Supplier)?	1) Approx 180 single phase, 30 polyphase. All of these are our standard meters so would be suitable for settlement purposes. 2) The majority have been paid for by the Export Energy Supplier. Most are installed as a "check" meter alongside the Import Meter and the ownership has been passed to the customer. Meters have been installed without an Export MPAN with the supplier making "ad-hoc" arrangements for meter reading and payment for Export energy. More recent installations have been installed with two MPANs and formal meter operator/data collector processes in place. 3) Several hundred Export Meters have been installed. All meters are OFGEM Approved, are listed on Schedule 4 of the Meters (Certification) 1998 Regulations and are of a standard that could be used in Settlement. 4) Approximately 200, all of which could be used in settlement. 5) All meters provided by Dataserve are compliant for use within the Settlement arrangements.			
6	Do you believe that the new P213 process should be optional (so that Suppliers can still register Import/Export sites using 2 separate MPANs)?	8 respondents (37 Parties + 8 non Parties)	4 respondents (10 Parties + 8 non Parties)	2 respondents (9 Parties + 2 non Parties)	1) There is no need to force a Supplier to have to adopt this process if they don't want to – and there may be benefits in two separate MPANs, two different Suppliers etc 2) The arrangement should offer Customer choice. P213 is about facilitating, not dictating. 3) To ensure consistency there should only be one process and this should be the existing arrangements introduced by P081. A choice of options will only create confusion and inaccuracies in Settlement. 4) Competition in microgeneration is at its very early stages.

Q	Consultation question	Yes	No	Neutral	Comments
					Having this mod as an option will allow the market to develop in whichever way gives the customer the best return If this was the only option there would be no competition in export, only the existing competition in import. You could argue the same case for only having 1 ID for gas and electric as most customers opt for a dual fuel package. 5) To answer this question, the Micropower Council believes it is necessary to understand: • what, if any, further benefits could be achieved in terms of simplification/streamlining processes and reducing costs if the "single MPAN" option is mandatory for some (possibly just the smallest) or all customers; and • what extent the dual MPAN approach would become redundant if the single MPAN option is developed, which is in turn affected by: o the likelihood that customers are going to want to have separate suppliers for import/export; o the likelihood that suppliers will want to offer independent import/export arrangements to customers (particularly if the single MPAN solution is less costly for them). If it is clear that the dual MPAN option is unlikely to be used by suppliers/customers and a more cost effective and simpler solution could be developed by removing the dual MPAN option (for some or all customers) then we would strongly support further exploration of this option. 6) The only case for a single MPAN is where Import and Export Registers are provided on a single Credit meter that has dual functionality. In addition, both Import and Export suppliers must be the same and Import and Export Meter Operators have also to

Q	Consultation question	Yes	No	Neutral	Comments
					be the same. Even if this minority situation is present, then the number of SSC codes will need to double to accommodate instances of with and without generation. This situation needs to exist for the duration of the Import/Export agreement. With a single MPAN approach there is a much higher chance that meter register functionality will be confused. If two different suppliers are involved then who is responsible for meter maintenance costs on a single meter, who pays for an end of life change, who is responsible for fault reconciliation of lost units? The use of Two MPANS for an Import and Export installation offers much greater flexibility of customer choice in appointing an Energy Supplier, and greater clarity of meter ownership. There is no need to double the number of SSC codes, increasing meter reading and billing accuracy. There may also be installations with Prepayment or twin element tariff requirements. A two MPAN approach (Three in the case of a twin element installation) more easily accommodates these arrangements. 7) There is no driver at present to make this process mandatory, by making the process as simple as possible participants will be more likely to use it. 8) Although we have concerns about the viability of registering import and export to different Suppliers, we believe that the option of registering separate MPANs has to be catered for, even though this is likely to add extra cost and complexity. 9) From a NHHDC and NHHDA point of view the single mpan and 2 mpan options both already work so having P213 as optional will not cause any problems. However it is always clear what is going on if there is only one process.

Q	Consultation question	Yes	No	Neutral	Comments
					10) Suppliers should in principle be free to choose the method they feel is the most efficient for their customers. However we should be aware that by making any change optional Suppliers will in effect have to devise systems and processes to support both types. Otherwise customers will be potentially disadvantaged via a lack of choice when contemplating a change of Supplier and Suppliers would be denied the opportunity to provide such a service. As such we would urge the group to ensure the most efficient outcome is reached. 11) Strictly from our perspective as a Party Agent we believe that the solution proposed in P213 should be obligatory as this would avoid confusion about the correct procedures to be followed and the risks to settlement associated with any confusion. 12) Where one supplier is involved in the customer offering, it should be a requirement that there is one MPAN; where the customer chooses to use two providers, the export provider should be responsible for the creation and disconnection of a separate MPAN at the end of such relationship.

Q	Consultation question	Yes	No	Neutral	Comments
7	Do you believe there are any other solutions or options[12] that the Modification Group has not identified and that should be considered?				1) We are of the opinion that the current arrangements (introduced by P081) to register Export MPANs in Settlement is acceptable and should remain. It would be more beneficial to Settlement to ensure that this process is followed by all. 2) The P213 process requires a single supplier for both import and export. The existing 2 MPAN solution must remain for as long as the customer is entitled to use different suppliers for import and export. 3) Mandate the registration of export meters. 4) Pending BSC/SVA systems re-procurement and the introduction of 'smart' metering, an alternative way of achieving the objectives of P213 may be via a simplified version of the P81 process, restricting the imports and exports to a single Supplier and allowing the 2 MPANs to be 'Related'. 5) As alluded to in question 3 Scottish Power is supportive of the principle of trading both import and export on a single MPAN, however we believe the proposed Mod would introduce an unacceptable level of error. The present EAC/AA formula's would not be appropriate for these customers on either the import or export registers. It is inconceivable that there could be an acceptable method of profiling such customers that would not result in a significant level of error. The Mod also does not provide enough assurance on how reads from such sites would be validated. Any over-recording of export consumption would result in a change in Group Correction Factor that would benefit the non-compliant party while disadvantaging others. What measures should we take to avoid this? There is also no evidence that LLF's would accurately reflect the actual losses relating to such sites. Given the above concerns Scottish Power suggests the following: • To overcome the issues of the level of estimation used in NHH settlements and the use of profiling, readings for export sites should be submitted in HH format. Readings for both registers would be taken every 30 mins however the data retriever would not necessarily need to dial the meter each day. This could be implemented by the use of Smart or AMR metering and could in fact be a driving force for the use of this technology. • The cost of this may be slightly higher than the present Mod in terms of changes to systems and the provision of metering, but it would avoid the disproportionate cost of managing data inconsistencies and disgruntled customers. The appropriateness of LLF's for export sites should also be investigated. However given that such sites are exporting energy to the network as well as importing from it there is a strong argument that the overall level of losses could in

[12] The options that were being considered by the Group are described in detail in the Requirements Specification, which was issued for Impact Assessment at the same time as this Initial Consultation.

Q	Consultation question	Yes	No	Neutral	Comments
					fact be zero. 6) No – P02 reviewed many potential solutions and this was the recommended way forward.
8	Are there any further comments on P213 that you wish to make?				1) P213 is about facilitating. One thing that has not been covered is the need of the Supplier to de-register the export should they not want the export included in settlements. 2) We are concerned that the new P213 process discourages competition and is not in the best interest of the customer. Currently, a customer can choose to register the Import and Export MPANs separately with different Suppliers. Implementing P213 would remove this choice of Supplier thus reducing consumer choice. 3) Having Import and Export on the same MPAN would distort Settlements and, to maintain the accuracy of Settlement, Import and Export should be recorded as separate MPANS. 4) It would seem more beneficial to use the current arrangements (introduced by P081) to register Export MPANs in Settlement and work towards making it compulsory for all Suppliers to follow. 5) We believe that P213 is an unnecessary modification which will deliver minimal benefits to customers. Mandating of export meter registration under P81 would protect the settlements system from imbalances caused by unregistered microgeneration spill. 6) Para 3.4 raises the question of why suppliers don't currently register more export sites. Clearly only suppliers are able to answer this question in detail. However, the Micropower Council's discussion with industry members suggests that there are a number of reasons that include both the defects that this Mod is trying to address and other difficulties, such as meter installation. We suggest that most of these other problems arise because of the relative newness of the industry and are resolvable and that the existence of other, resolvable difficulties, should not detract from efforts to address this particular and significant issue. We also understand that there are more customers with export meters than the 25 currently registered which suggests that the administration arrangements themselves are a major part of the problem. 7) Our preference is that the industry continues to use the existing arrangement for microgeneration sites (i.e. separate mpans for the import and export). This new proposal, while possibly simpler and more cost-effective for the Supplier, makes it more complex for the Meter Operator and Data Collector, due to the following: • The number of possible SSC codes would increase substantially.

Q	Consultation question	Yes	No	Neutral	Comments
					• In theory there would need to be a new SSC code for every possible combination of existing Import SSC with the existing 19 standalone export SSCs. • Our systems would have to support all of these new SSC codes, and Meter operations field staff would have to be instructed by the Supplier exactly which SSC to set the meter up as, and what physical meter type is required for this. • With such a large number of possible SSC codes to choose from, the potential for errors would increase. This would lead to a decline in data quality for these sites. Any problems under the new arrangements would affect import and export energy for these sites, because both are recorded on the same mpan. As already detailed, the number of SSC codes would need to double. One version for Import only, the second for Import/Export combined. P213 appears to have been drafted to solve some real and anticipated problems. If the modifications are adopted, our consideration is that there will be more scope for error, more SSC codes required, less flexibility for the customer to change Supplier/Meter Operator and an increase need for meter changes in the future. A much tidier and flexible arrangement is to register Import/Export sites with Two MPANS. Ownership of the meter and associated processes is clear, minimising meter registration errors, reducing billing errors and reducing the need for site visits. 8) The modification group should be attempting to design a low cost, non complex approach which will be easy to administer while delivering the desired values into settlement. The solution the group deliver must not hinder the change of supplier process. 9) If this market is to develop significantly it is important to have a solution which allows exports to be accounted for in Settlements without unnecessary costs and complexity. Pending the outcome of impact assessments it is not clear whether this proposal meets this criterion, since there may be significant impacts on a variety of Supplier processes including Settlement validation, pricing, demand forecasting, customer and data transfer and billing. 9) With the current process the Import and Export mpans can have different Profile Classes, P213 will require only one PC for the mpan and hence the same profile class for the import and export registers. It may be possible to work around this by using different SSCs, eg different SSCs for different export profile classes. 10) Scottish Power understands the reasons for introducing such a change but would urge to Mod Group to ensure what they are doing is in the best interest of Settlements and ultimately for customers. At present the Mod suffers from a complete lack of evidence, failing to prove that the proposed solution would work effectively when considering all industry processes. Too much seems to be based on generalities and not enough on

Q	Consultation question	Yes	No	Neutral	Comments
		specific examples and robust analysis. Scottish Power urges the group to walkthrough these processes detailing the impact and considering what changes may be required. We would not welcome a change unless it was robust and enduring.			

Details of the arguments made by respondents can be found in section 3 along with the Modification Group's consideration of these arguments. Full copies of the consultation responses are available of the ELEXON website

APPENDIX 7: RESULTS OF SECOND ASSESSMENT PROCEDURE CONSULTATION

17 responses (representing 53 Parties and 19 non-Parties) were received to the second P213 Assessment Procedure consultation.

A summary of the consultation responses is provided in the table below (bracketed numbers represent the number of Parties and non-Parties represented by respondents). The full responses received to the second Assessment Consultation are available to download from the P213 page of the ELEXON website. Summary of Responses.

Details of the arguments made by respondents can be found in Sections 3 and 4, along with the Modification Group's consideration of these arguments.

Q	Consultation question	Yes	No	Neutral	Brief Summary of Key Comments
1.	Do you believe Proposed Modification **P213** would better facilitate the achievement of the Applicable BSC Objectives?	8 respondents (13 Parties + 10 non-Parties)	7 respondents (39 Parties + 6 non-Parties)	2 respondents (1 Party + 3 non-Parties)	
2.	Do you believe Alternative Modification **P213 (removal of two MPAN P81 solution)** would better facilitate the achievement of the Applicable BSC Objectives when compared to the current baseline?	5 respondents (3 Parties + 4 non-Parties)	11 respondents (50 Parties + 12 non-Parties)	1 respondent (3 non-Parties)	-
3.	Do you believe Alternative Modification **P213 (removal of two MPAN P81 solution)** would better facilitate the achievement of the Applicable BSC Objectives when compared to the Proposed Modification?	8 respondents (19 Parties + 9 non-Parties)	8 respondents (33 Parties + 10 non-Parties)	1 respondent (1 Party)	-
4	Do you agree with the Group's inclusion in the solution for the capability of separate LLFCs to be applied (within Central Systems) to the Import and Export on a single Import/Export MPAN (Section 2.3.3 of the consultation document)?	9 respondents (35 Parties + 8 non-Parties)	4 respondents (1 Party + 8 non-Parties)	4 respondents (17 Parties + 3 non-Parties)	Two respondents indicated that they felt this added unnecessary complexity.
5	Do you agree with the principle underpinning the settlement process scenarios (to allow for movement between one and two MPANs to settle NHH export – section 3.2.1 and Appendix 4) that the new Supplier should be responsible for the Export MPAN if they wish to move to a single MPAN solution? Note this is for the Proposed solution only.	9 respondents (28 Parties + 10 non-Parties)	5 respondents (24 Parties + 2 non-Parties)	3 respondents (1 Party + 7 non-Parties)	-
6	Do you support the implementation approach described in the consultation document or do you support a separate release approach based	6 respondents (13 Parties + 4	4 respondents (23 Parties + 6	7 respondents (17 Parties + 9	Several respondents who indicated that they disagreed or were neutral to this approach noted

Q	Consultation question	Yes	No	Neutral	Brief Summary of Key Comments
	on a 12 month implementation period from the Authority's decision (due to the importance of the Climate Change Sustainability Act)?	non-Parties)	non-Parties)	non-Parties)	that more than 12 months was needed. 2 respondents indicated that 18 months was needed and 1 respondent indicated that 24 months was needed.

Q	Consultation question	Yes	No	Neutral	Brief Summary of Key Comments
7	Do you believe there are any alternative solutions that the Modification Group has not identified and that should be considered?	2 respondents indicated that they thought the current (P081) processes should be reviewed, with the intention of improving the current baseline. 3 respondents indicated that they believed mandating the use of P081 should be considered (so that all Export has to be recorded in settlement, using the P081 process). 2 respondents indicated that they thought that a split between the domestic and non domestic market should be considered in more detail.			
8	As a result of the additional information included in the consultation document (particularly the process diagrams in Appendix 4) has the impact of P213 on your organisation changed?	3 respondents (16 Parties + 5 non-Parties)	10 respondents (25 Parties + 13 non-Parties)	4 respondents (12 Parties + 1 non-Party)	Those respondents who indicated that the impact on their organisation had changed stated that this was due to increased complexity. One Distributor indicated that the cost of the change was in approximately £140,000 and one Supplier indicated that the cost was approximately £2,000,000 due to the need to update 2 systems. Two respondents highlighted that they had insufficient detail and time to provide accurate details of the full impact.
9	The proposed process for Change of Supplier is based on information from the customer and the new and old Suppliers liaising through the customer. Do you have any concerns with this approach and/or suggestions?	13 respondents (49 Parties + 18 non-Parties)	2 respondents (3 Parties + 0 non-Parties)	2 respondents (1 Party + 1 non-Party)	Respondents who noted concerns with regard to this assumption were concerned as customers may have incomplete information themselves (e.g. Change of Tenancy) or may provide incorrect information.
10	The P213 solution would require a change to the D0269 and D0270 MDD data flows, although P213 may not seek to change both versions of each of these flows. Which versions of the D0269 and D0270 do you use?	3 respondents indicated that they currently use version 2 (0 Parties + 10 non-Parties). 5 respondents indicated that they currently use version v3 (18 Parties + 2 non-Parties)) 7 respondents indicated that they currently use version v2 and v3 (34 Parties + 6 non-Parties) Not all respondents provided an answer to this question.			

Q	Consultation question	Yes	No	Neutral	Brief Summary of Key Comments
11	It is suggested that P213 will only seek to update Version 3 of the D0269 and D0270. If P213 was implemented on just version 3 would you amend your systems to receive that flow?	7 respondents (27 Parties + 11 non-Parties)	4 respondents (19 Parties + 3 non-Parties)	6 respondents (7 Parties + 5 non-Parties)	
12	Does P213 raise any issues, in particular with scenarios and assumptions in Section 3.2.1/Appendix 4, that you believe have not been identified so far and that should be progressed as part of the Assessment Procedure?	2 respondents (17 Parties + 2 non-Parties)	15 respondents (36 Parties + 17 non-Parties)		One respondent felt that there was no clear incentive for the losing Supplier to be involved in the process of changing the customers metering status after they have lost the site. One respondent noted that there may well be further issues with the processes described in the consultation document, that hadn't yet come to light.
13	Are there any further comments on P213 that you wish to make?	4 respondents highlighted that they believed that the cost of implementing P213 is high when compared to the benefit it would provide. 3 respondents indicated that the increase in the number of SSCs presented an increased risk of settlement error. 1 respondent noted that the believed the LLFC solution was overly complex. 1 respondent noted a potential risk to data quality due to the increase complexity of P213. 1 respondent believed that making the current (P081) processes compulsory would be a better solution to the current issues.			

APPENDIX 8: PARTY AND PARTY AGENT IMPACT ASSESSMENT RESPONSES

PARTY AND PARTY AGENT RESPONSES

Please provide responses to the following questions:

1. Would the Proposed Modification, as outlined in section 1 and 2 of the attached Requirement Specification for Modification Proposal P213, impact your organisation? Yes / No*
2. If yes, please provide a description of the impact, any costs incurred, and the implementation timescales[13] required for options (a), (b.i), (b.ii), (b.iii) and (c).
3. Would the potential Alternative Modification, as outlined in section 3 and 4 of the attached Requirement Specification for Modification Proposal P213, impact your organisation? Yes / No*
4. If yes, please provide a description of the impact, any costs incurred, and the implementation timescales[13] required for options 1, 2 and 3.
5. Any other comments:

Company		Impact?	Additional Information
Accuread	Proposed Impact	Y	Yes, but only if the MDD flows changed b.i only – about 6 months.
	Alternative Impact	Y	The same impact as Proposed Modification (1) As [described in response to question] 2
	Comments		With the current process the Import and Export mpans can have different Profile Classes, P213 will require only one PC for the mpan and hence the same profile class for the import and export registers. It may be possible to work around this by using different SSCs, eg different SSCs for different export profile classes
British Energy Generation Ltd, British Energy Generation (UK) Ltd, British Energy Power &	Proposed Impact	Y	We expect the costs of the proposed modification, as outlined in section 1 and 2, to be high. This will have an impact on our current processes and would require significant system changes. We anticipate that any system changes will take at least 12 months.
	Alternative Impact	Y	We expect the costs of the proposed modification, as outlined in section 3 and 4, to be high. This will have a significant impact on our current processes and would require major system changes as a result of the changes to the DTC and flows. We anticipate that any system changes will take at least 12 months.
	Comments		Please note that the response to question 2 and 3 above are estimates and, without a thorough review, we cannot commit to completing any system changes within 12 months and this may take longer.

[13] The time required should be the time needed between the approval of the redline text to Code Subsidiary Documents (CSDs) by the appropriate Panel Committee and the implementation date of P213.

Energy Trading Ltd, British Energy Direct Ltd, Eggborough Power Ltd			
Scottish & Southern Energy PLC	Proposed Impact	Y	
	Alternative Impact	Y	
	Comments		-
United Utilities	Proposed Impact	Y	
	Alternative Impact	Y	
	Comments		6 months implementation timescale. Costs unknown at present. Processes and procedures would need to be revised.
Npower Ltd	Proposed Impact	Y	<u>Possible Impacts</u> Initial assessment suggests that there would have to be changes to various internal systems, which would have to be supported by process changes. Further detail on these is outlined below although this is not an exhaustive list and more detailed analysis would be necessary to understand how extensive such changes would ultimately be. It is likely that changes to support import and export with different load curves, for forecasts based upon standard load curves, on the same MPAN in the same half hour, would be required. System changes would be needed in MOA systems to validate that each SSC has two settlement TPRs recorded and that each one is identified as either being Import or Export and having correct Measurement Quantities.

			Revised Register Conventions will also need to be considered for both combined Import and Export registered meters and WP140 would have to be updated to reflect this. It would involve changes to job booking systems to ensure the correct job type is raised and validated, should a new job booking type be required. Changes to Metering Systems would be required to load exclusive Export SSC and combined Import / Export SSC, which will need new deprogramming logic via new job work types to allow the appropriate register data to be captured and uploaded into MOA with the correct register IDs, Measurement Quantity ID and TPR combinations. Additional validation relating to dual Import/Export measurements within one MPAN would also have to be considered. Initial analysis indicates that we would prefer the data used in the Substitution Table to be included in the MDD data flows received by participants as described in section 2.3.1.1 (b). This would keep MDD as the single master of SSC data and ensure transparency. Changes to accommodate this will be required to the validation of MDD in all systems that receive these flows. Meter Reading validation scripts and associated procedures may need altering too. <u>Implementation Timescales required and costs:</u> We are not in a position to answer this at present as we feel there is insufficient detail to undertake a full analysis of potential impact to systems and hence we are unable to quote for costs for the impacts.
	Alternative Impact	Y	Similar to those described above.
	Comments		2.2.3 'Change of Supplier Process (Import or Export)'. If the customer requests a CoS on either the import or export, and the single meter remains in place, how would the D0010 be populated i.e. would each Supplier be able to see the readings for the other Supplier's MPAN? Where Supplier 'A' has registered a singular MPAN under P213 conditions and there is a subsequent CoS to Supplier 'B', can it be confirmed that Supplier 'B' will be obliged to maintain that MPAN as P213 where there is still a need for both Import and Export. MOA's would want to avoid any possibility of another Supplier wishing to revert to 'P81' thus forcing the process of either a logical removal of a meter/register from the MPAN and then having to share the meter across a newly registered export MPAN. Obviously there will be occasions as stated where the export requirements may no longer be needed, however we need to avoid swapping and changing unnecessarily. A Supplier would have to use the same NHHMO and NHHDC for the import and export registers if they were the Supplier to both elements of the single MPAN, and the read frequencies for import and export registers would need to be the

			same. There may be situations where a Supplier may want to have different agent arrangements or read frequencies for the import and the export registers. Note: As an observation to Annex 2 in the modification proposal, the example shows SSC 0482 with Profile Class of '8'. My understanding is that 0482 was declared for profile class 1. Profile Class 8 should have a SSC of 0489. Is this simply an error in the example? Would it be permissible to have 2 meters, one import and one export with just a single MPAN, or is this solution implying that a single meter, regardless of the number of registers, is a pre-requisite for the 1 MPAN solution.
PTCMOA	Proposed Impact	N	
	Alternative Impact	N	
	Comments		-
Imserv Europe Ltd (UKDC NHHDC/DA/MO)	Proposed Impact	N	
	Alternative Impact	N	
	Comments		-
United Utlities - Distributio n	Proposed Impact	Y	
	Alternative Impact	Y	
	Comments		Late response received after the Modification Group meeting: Please find below an Impact Assessment of P213 'Facilitating Microgeneration (Optional Single MPAN) by United Utilities. These comments are very high level as from the current proposals it is difficult to carry our a very detailed analysis

			The first proposal to allow a single MPAN to be used for both Import and Export Impact upon UU as follows; • Billing procedures would have to be changed as we will no longer be able to identify export details for SSEGs from the MPAN. Currently UUE have 12 Microgeneration sites the actual cost of producing an invoice outweighs the cost of billing export sites. It will take UUE a number of years to recuperate the cost of implementing this change. (UUE do not currently bill microgeneration export sites) • There will also be system implications as new configurations may be introduced which will all have to be linked. Potentially there will be a major impact on MDD if exports can be configured on all Profile Classes (01,02,03,04,05,06,07,08) whereas now all exports are on profile class 08. This would mean that SSC's would need to be introduced on all profile classes. – • Introduction of multiple Profile Class Combinations will again cause procedural and system difficulties as currently only one default profile class of 8 is used. • UUE are not confident that Suppliers would update MPAS on the Single MPAN microgeneration scenario therefore UUE would not be aware of the correct meter configuration at a customers premise. • It is not best practise to have two solutions to enable microgeneration as this will make it difficult to track and lead to many data inconsistencies. How would UUE know which scenario a Supplier has adopted? The second proposal to allow different LLFCS to be assigned to the import and Export would again cause us system and procedural problems. Additionally we have a limited number of LLFCs available in our GSP Group, this would have a high impact on UUE Business, and would provide no benefit. In summary the potential costs of implementing this change would be disproportionate to the income we receive from these sites. All of UU systems would be impacted and several business processes would need to be altered at cost to UUE which would take years to recover.
Central Networks (EMEB and MIDE MPIDs)	Proposed Impact	Y	See comments.
	Alternative Impact	Y	See comments.
	Comments		Whilst it is appreciated the P81 does not present an entirely robust solution to the day-to-day management of export customers, it does nevertheless offer a working solution that we have already invested significant time and IS resource into implementing. We do not feel that P213 is a viable alternative at this time as it presents no benefit over P81 to us as

			the LDSO given the low volume of export currently generated by micorgeneration sites. The implementation of P213 will cost us a minimum of 65 man days to implement system and process changes, and training for system users and field staff. We would require in excess of 18 months to implement these changes given existing projects which are already underway. We are also concerned about the timing given the advent of Elexon's Project Isis which is going to involve the re-structuring to MDDM and the associated repetition of the above work. Given that we are not supportive P213, should the industry collectively support the proposals we would want to be party to discussions on the structure and implementation of any changes.
E.ON UK Energy Services	Proposed Impact	Y	(a) no impact, (b.i) Amendments would be required to systems in order to ignore the Substitution Table Data, (b.ii), none (b.iii) none and (c) none.
	Alternative Impact	Y	We would require the usual timescales associated with an upgrade to the centrally provided NHHDA systems.
	Comments		-
E.ON UK	Proposed Impact		-
	Alternative Impact		-
	Comments		<u>P213 Impact Assessment Consultation response</u> Please find attached our responses to the impact assessment questionnaire in response to the above consultation. I have also included an annexe document which I believe outlines some of the scenarios where there are probable process failures in the two separate MPAN solution under P81 which would be resolved by this modification. With regard to the Registration of NHH Export – the consultation has possibly over simplified the rationale for why suppliers are choosing not register sites in settlement – citing the current arrangements as being too complex and that the cost of metering is a factor in supplier's decisions. The creation and registration of a second export MPAN in itself is quite simple. Similarly metering costs can be reduced by the use of a combined import and export meter and by renegotiation of the commercial arrangements; yet evidenced by the number of sites currently registered suggests that there are other barriers that are not so easily overcome. One of our concerns is that there is no relationship between the two MPANs and that once a change of supplier or tenancy event occurs there are real problems with visibility of the export capability by the import supplier. Our analysis of the

		problems likely to be encountered once these change events have happened is attached. We previously tried to address these concerns with a simple modification to the MRA which "Related the MPAN by reason of export", which could be unlinked at the request of the customer who desired to have two separate suppliers. This modification had no BSC implication and yet failed as suppliers saw this only as an interim measure and that in itself relating the MPANs was insufficient to remove the barriers to settling export. The costs in managing the second MPAN as a separate record and the metering and distribution costs associated with that MPAN completely erode any value in the export reward propositions and will not improve the number of sites being registered. This is likely to introduce errors into settlement in the future when the number of generators increases as the government continues to put its micro-generation strategy more and more into the public arena. In addition, we believe that in the main customers will choose to have one supplier in the case where their main driver for installing the microgenerator is the avoided import costs and where export reward is seen as an added bonus. In those cases we would wish to ensure that the customer can receive that reward at minimal cost. We believe the group should consider the option of mandating a single MPAN solution based on scale or size of generator installed.