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MP4 Dual Notification
Requirements Specification

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Version 0.1 issued for initial review.

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d Changes Forecast

Changes as a result of various reviews.

e Related Documents

P4 Modification Proposal.

MP4 Modification Proposal: Dual Notification Process Specification V2.0

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1 INTRODUCTION

1.1 Background and Scope

The MP4 Modification Proposal for dual notification was discussed by the Panel at the BSC Panel Meeting of the 5th April 2001. The Panel determined that the Modification Proposal should be passed to the MP4 Modification Group for Assessment. The precursor to this assessment was the circulation of the MP4 Modification Proposal for consultation, with the responses from the consultation provided into the MP4 Modification Group.

The MP4 Modification Group, at their meeting of the 26th April 2001, passed the specification of the dual notification process to the MP4 Modification Sub Group. The MP4 Modification Sub Group determined and agreed the specification of the dual notification process at their meeting of the 4th May 2001, and provided the agreed specification to the full MP4 Modification Group at the meeting of the 16th May 2001. The MP4 Modification Group agreed the specification and determined that it be progressed and used as the basis of the Requirements Specification for the implementation of dual notification. The industry consultation and impact assessment of this Requirements Specification will provide the basis for the Assessment Report for the P4 Modification Proposal.

This document represents the initial MP4 Dual Notification Requirements Specification.

1.2 Purpose and Structure of Document

The primary purpose of this document is to specify ELEXON's (representing the MP4 Modification Group) requirements for the requisite change to Central Services functionality in sufficient detail to allow BSC Parties to determine and assess the changes required to their functionality, processes and systems in order to support dual notification, and the associated timescales of such implementation.

1.3 Glossary

The following acronyms have been used throughout this document:

ACK	Acknowledgement
BSC	Balancing and Settlement Code
BST	British Summer Time
CMP	Central Matching Process
CRA	Central Registration Agent
dp	Decimal Places
ECVAA	Energy Contract Volume Aggregation Agent
ECVN	Energy Contract Volume Notification
ECVNA	Energy Contract Volume Notification Agent
ECVNAA	Energy Contract Volume Notification Agent Authorisation
GMT	Greenwich Mean Time

IDD   Interface Definition Document

MVRN   Metered Volume Reallocation Notification

MVRNA   Metered Volume Reallocation Notification Agent

MVRNAA Metered Volume Reallocation Notification Agent Authorisation

NACK   Negative Acknowledgement

NETA   New Electricity Trading Arrangements

URS   User Requirements Specification

2   DUAL NOTIFICATION REQUIREMENTS SPECIFICATION

2.1   Requirements Specification Overview

The specification of the process for the dual notification of Energy Contract Volumes and Metered Volume Reallocations is attached for information, as Appendix 1. This specification of the process is a relatively high level view of the overall process, as agreed by the MP4 Modification Group at their meeting of the 16th May 2001. The MP4 Modification Group agreed at this meeting that this specification of the process provide the basis for the Requirements Specification of the change required to implement dual notification under NETA.

At a very high level, dual notification is the process whereby agreed contract volumes are submitted by both Counterparties to a centralised matching process and where valid, contract volumes are matched and submitted to settlement. In contrast, single notification is the submission of volume notifications by one nominated ECVNA on behalf of both Counterparties, into the Central Services, where valid contract volumes are submitted to settlement.

The following process representation details the requirements agreed at a relatively high level and is included here to provide a context for the following specification of requirements.
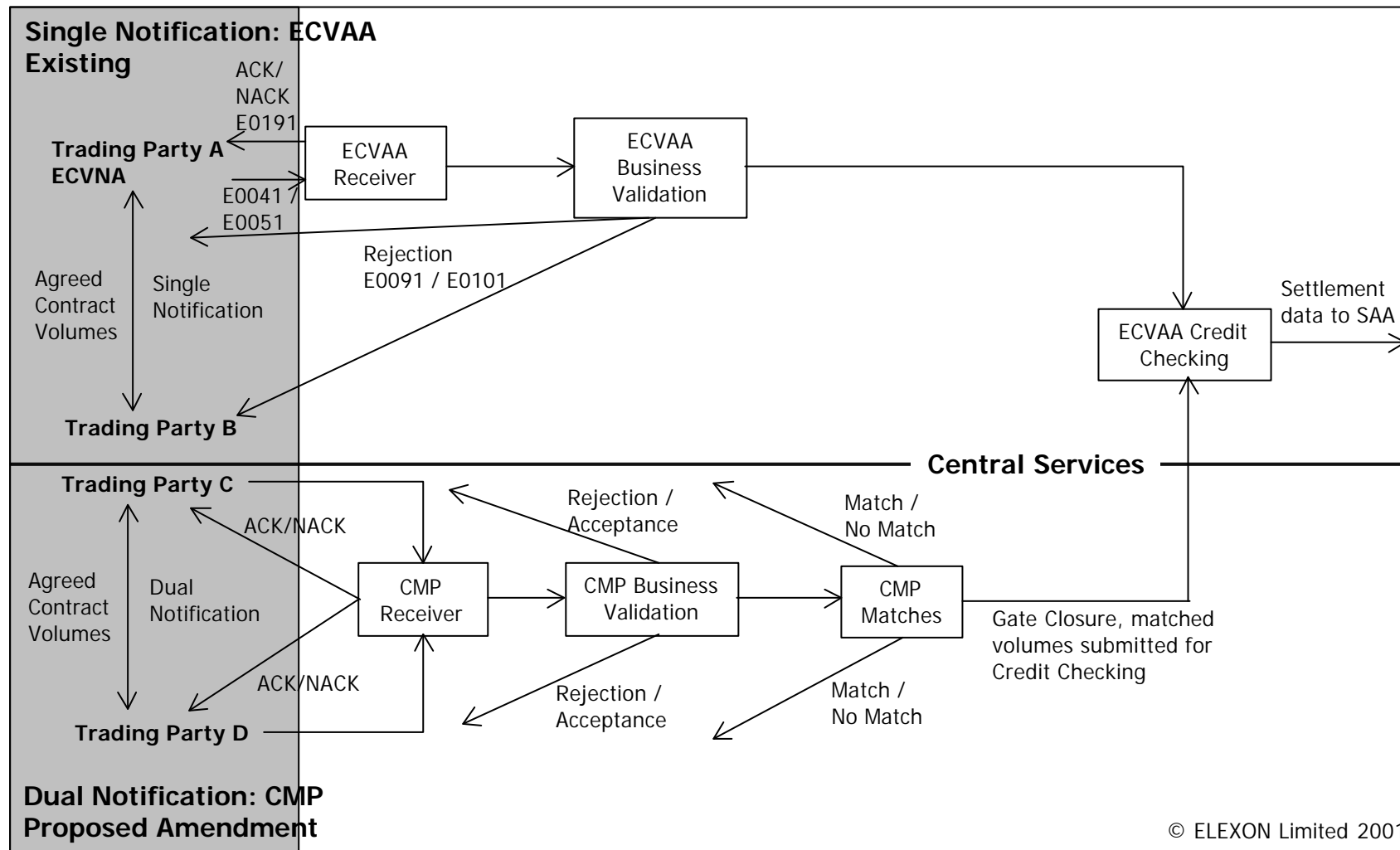
Dual notification is intended, at least initially, to run as an optional process in parallel with the existing single notification process. Therefore where Trading Parties wish to continue utilising the single notification process to the exclusion of dual notification, there will be no impact on that Trading Party.

In order to minimise impact on Trading Parties wishing to use the dual notification process, the amount of change has been kept to a minimum, for example, existing processes, functionality, and interface structures / formats have been utilised wherever possible. It is intended that Trading Parties be able to use both single and dual notification with as little impact as possible, and to that end, the endeavour has been to ensure consistency, wherever possible, between the two processes.

It should be noted that for the process representation, existing interface references have been utilised in order that the key elements of the dual notification process are identifiable against the existing process. This provides a key for Trading Parties and service providers to determine the overall impact of this change on their existing systems and processing. No such reference is made in the detail of the requirements specification, other than to provide an example for comparison, to avoid confusion / misinterpretation of the requirements.

2.1.1 Process Representation

This process representation details a high level view of both the existing single notification process (with relevant interface references) and the proposed dual notification process, and their relationship to Central Services. The greyed out area indicates non Central Service functionality. This schematic is also intended to provide a comparison of both the processes and to indicate the functionality where both processes are running in parallel.

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2.2 Notes

- Reference to Counterparties includes Counterparty 1 and Counterparty 2 for ECVNs, Lead Party and Subsidiary Party for MVRNs, and is assumed to include the ECVNA / MVRNA functionality, therefore there is no reference to Counterparties and ECVNA / MVRNA separately.

- The dual notification functionality is referred to as the Central Matching Process (CMP).

- Reference to volume notifications includes both Energy Contract Volume Notifications (ECVNs) and Metered Volume Reallocation Notifications (MVRNs), unless specified otherwise.

- Reference to contract volumes includes volumes (ECVN and MVRN) and percentages (MVRN) notified under both ECVNs and MVRNs, unless specified otherwise.

- Reference to Notification Agent(s) includes both Energy Contract Volume Notification Agents (ECVNAs) and Metered Volume Reallocation Notification Agents (MVRNAs).

2.3 CMP Requirements

- The operation of the CMP is covered by the provisions of the Balancing and Settlement Code and therefore forms part of the central services.

- The provisions of the BSC regarding systems failure and disputes around volume notifications would be extended to cover the CMP.

- Wherever possible, existing functionality and definition has been utilised to minimise impact on Trading Parties.

- Service levels and operational constraints are such that the CMP operates quickly and efficiently, even at large volume, and therefore the timings detailed in the process description are met.

- The CMP system is parameter based in order to ensure consistency with future potential changes, for example, changes to Settlement Period duration or changes to the length of Gate Closure.

- Information provision from other BSC Service Agents is of sufficient quality and quantity as to enable the CMP to undertake validation of volume notifications and associated tasks.

- Validation within such CMP system is consistent with other systems (for example ECVAA, where the CMP exists in parallel with ECVAA).

2.4   Volume Notification

The existing interface format[1] for volume notifications will be retained under dual notification in order to minimise impact on Trading Parties. However, the manner of usage will differ in order to best represent the requirements of the dual notification process.

Security levels for submission of Volume notifications will need to be such that the originator can be identified.

Volume notifications submitted under the dual notification process will be limited to a forwards notification of seven days (a rolling seven days) only.

Where Counterparties have agreed to utilise the dual notification process for submission of volume notifications then both Notification Agents will provide the information stated below in each interface.

Energy Contract Volume Notification Dataflow

ECVNs

ECVNAA Id[2] - should be populated with the ECVNAA Id of the main notifier ECVNA[3]

ECVNAA Key[4] - not validated for a dual notification

ECVN ECVNAA Id – utilised as is under existing single notification

ECVN Reference Code - utilised as is under existing single notification

Effective From Date - utilised as is under existing single notification

Effective To Date – should not exceed 7 days from date of submission

Energy Contract Volumes

Settlement Period (1-50)

Energy Contract Volume (MWh)

Metered Volume Reallocation Notification Dataflow

MVRNs

MVRNAA Id[5] - should be populated with the MVRNA Id of the main notifier MVRNA

MVRNAA Key[6] - not validated for a dual notification

MVRN MVRNAA Id – utilised as is under existing single notification

1.1.1.1

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[1] Based upon ECVAA-I004 (E0041) and ECVAA-I005 (E0051), for ECVNs and MVRNs respectively.

[2] With regards to the ECVNAA Id, this should be the same in both volume notifications, as this data item will form the basis for the match. Therefore this may affect Notification Agent systems regarding usage and population of this data item.

[3] i.e. both volume notifications submitted to the CMP for a match should contain the same ECVNAA Id / MVRNAA Id to ensure a match. Therefore determination / agreement by the Counterparties as to which ECVNAA Id / MVRNAA Id is utilised is required.

[4] With regards to the ECVNAA Key, there is no requirement for this to be populated under the dual notification process. Therefore the CMP system will not read or validate this data item if it is populated. This may impact Notification Agent systems regarding usage and population of this data item.

[5] With regards to the MVRNAA Id, this should be the same in both volume notifications, as this data item will form the basis for the match. Therefore this may affect Notification Agent systems regarding usage and population of this data item.

[6] With regards to the MVRNAA Key, there is no requirement for this to be populated under the dual notification process. Therefore the CMP system will not read or validate this data item if it is populated. This may impact Notification Agent systems regarding usage and population of this data item.

MVRN Reference Code - utilised as is under existing single notification

Effective From Date - utilised as is under existing single notification

Effective To Date – should not exceed 7 days from date of submission

MVR reallocations

Settlement Period (1-50)

Metered Volume Fixed Reallocation (MWh)

Metered Volume Percentage Reallocation (%)

2.5 Receipt of Volume Notifications

On receipt of the volume notification, the CMP system will respond by sending a response file. This response file – either a Positive Acknowledgement (ACK) or Negative Acknowledgement (NACK) [7], will indicate whether the data file received has been validated as syntactically correct. The ACK / NACK will contain the following:

- Received Date and Time – the date and the time the message being acknowledged was received, in GMT

- Response Date and Time – the date and the time the response message was generated by the receiving Party, in GMT

- File Name – the name of the file that the response relates to

- Response Code – code indicating the nature of the acceptance / rejection

- Response Data – additional data required to help in fixing any problem

Where a NACK is generated, no further action should be taken regarding loading the volume notification.

2.6 Business Validation

Where an ACK is generated, then within 15[8] minutes of the Received Time defined in the ACK, the data file should be business validated including the requisite generation of a business acceptance / rejection.

The business validation will accord with that defined in Section P of the BSC and with that defined in ECVAA-F005 and ECVAA-F006 in the ECVAA URS (however, where there are discrepancies between the defined validation criteria, that defined in the BSC should take precedence). Validation criteria will take into account that there is no requirement to validate the ECVNAA Key / MVRNAA Key, and will also take into account the limit of a

1.1.1.1

[7] Based upon ECVAA-I019 / E0191.
[8] This timescale could potentially be shortened but is not to be longer than the current 15 minutes.

forward seven days for the volume notification[9]. Seven days has been defined as it is the most appropriate length of time given current notification preferences and Trading Party requirement to submit weekly profiles and ensure matches for the week ahead.

For the specific circumstance of refusal and associated rejection due to Credit Default, then interaction between the CRA (regarding any amendments to the value of the 'Permit Notification Rejection' Flag), the credit checking mechanism / indebtedness calculator and the business validator is required. This is in order to comply with the BSC with regards to rejection and refusal on Credit Default grounds: Where the Credit Default Refusal Period is in force[10] (the Indebtedness is equal to, or in excess of, 90% and the 'Permit Notification Rejection' Flag is set to Yes), then any volume notifications which increase indebtedness for that Trading Party should be refused and a rejection generated to both Counterparties.

Where the received data file fails Business validation, then a business rejection[11] should be generated to the originator of the data file, according to defined service level time scales. Where such a rejection is generated, then no further action should be taken with regards to further loading / processing of the data file.

Dataflow for ECVN Rejection

Rejected ECVN

> ECVNA Id
>
> ECVNAA Id
>
> ECVN ECVNAA Id
>
> Effective From Date
>
> Effective To Date
>
> Filename of original submitted ECVN and Rejection Reason[12]
>
> Rejected Energy Contract Volumes
>
> > Settlement Period (1-50)
> >
> > Energy Contract Volume (MWh)

Dataflow for MVRN Rejection

Rejected MVRN

> MVRNA Id
>
> MVRNAA Id

1.1.1.1

[9] An Effective To Date in excess of 7 days from the time of submission will cause a business validation failure and an associated rejection.

[10] BSC Section M 3.3.3 (a)(i) defines this as 'the period from Gate Closure for Settlement Period j until Gate Closure for the Settlement Period after the first subsequent Settlement Period in relation to which the Credit Cover Percentage for the Trading Party becomes not greater than 90%.'

[11] The business rejection should utilise the format specified for ECVAA-I009 (E0091) and ECVAA-I010 (E0101), with the addition of a data item detailing the filename of the rejected data file.

[12] The Rejection Reason is currently a free format text field, therefore this can be extended to reference the filename to which the rejection pertains to ensure that the Trading Party is certain which file is being rejected.

MVRN MVRNAA Id

Effective From Date

Effective To Date

Filename of original submitted MVRN and Rejection Reason[13]

Rejected Metered Volume Reallocations

Settlement Period (1-50)

Metered Volume Fixed Reallocation (MWh)

Metered Volume Percentage Reallocation (%)

Where the data file passes such validation, then a business Acceptance[14] should be generated to the originator of the data file. This will repeat the information received in the original submission, as well as providing the filename of the original volume notification received to enable exact identification of the accepted submission by the Originator.

Dataflow for ECVN Acceptance

Accepted ECVN

ECVNA Id

ECVNAA Id

ECVN ECVNAA Id

Effective From Date

Effective To Date

Filename of original submitted ECVN

Accepted Energy Contract Volumes

Settlement Period (1-50)

Energy Contract Volume (MWh)

Dataflow for MVRN Acceptance

Accepted MVRN

MVRNA Id

MVRNAA Id

MVRN MVRNAA Id

Effective From Date

1.1.1.1

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[13] The Rejection Reason is currently a free format text field, therefore this can be extended to reference the filename to which the rejection pertains to ensure that the Trading Party is certain which file is being rejected.

[14] Such acceptance should be based on the ECVAA-I009 / E0091 and ECVAA-I010 / E0101, with the relevant fields indicating the Settlement Periods and contract volumes which have been accepted, and the filename that the acceptance relates to.

Effective To Date

Filename of original submitted MVRN

<u>Accepted Metered Volume Reallocations</u>

Settlement Period (1-50)

Metered Volume Fixed Reallocation (MWh)

Metered Volume Percentage Reallocation (%)

Where the data file passes business validation, then it is made available for further processing.

2.7   Clock Change Rules

The CMP shall apply default rules to the processing of volume notifications for clock change days, unless a specific clock change day notification has been submitted.

Where a volume notification is for a range of days the Settlement Period data is applied to a clock change day as follows:

For a 'short' day, having 46 Settlement Periods (i.e. the spring clock change when 1am GMT changes to 2am BST):

- Settlement Periods 1 to 2 (00:00 to 01:00 GMT) of the 'short' day take the values of Settlement Periods 1 to 2 (00:00 to 01:00 local time) of the 'normal' day notification;

- Settlement Periods 3 to 46 (02:00 to 24:00 BST) of the 'short' day take the values of Settlement Periods 5 to 48 (02:00 to 24:00 local time) of the 'normal' day notification;

- Settlement Periods 3 and 4 of the 'normal' day notification are not used on a short day.

For a 'long' day, having 50 Settlement Periods (i.e. the autumn clock change when 2am BST changes to 1am GMT):

- Settlement Periods 1 to 4 (00:00 to 02:00 BST) of the 'long' day take the values of Settlement Periods 1 to 4 (00:00 to 02:00 local time) of the 'normal' day notification;

- Settlement Periods 5 to 6 (01:00 to 02:00 GMT) of the 'long' day take the values of Settlement Periods 3 to 4 (01:00 to 02:00 local time) of the 'normal' day notification;

- Settlement Periods 7 to 50 (03:00 to 24:00 GMT) of the 'long' day take the values of Settlement Periods 5 to 48 (03:00 to 24:00 local time) of the 'normal' day notification.

Where a single day volume notification (i.e. Effective To Date equals Effective From Date) is received for all or part of a clock change day, the contract volumes for the specified Settlement Periods will be processed exactly as specified, i.e. the default rules described above are not applied, as it is assumed that the volume notification submission has taken account of the clock change.

2.8 Receipt of Data File into CMP Database

On successful validation of the data file (including the requisite generation of business level acceptance), the data file will be placed into the CMP database. The CMP will undertake a comparison of unmatched or partially matched data files with the same ECVNAA Id submitted by that Trading Party (i.e. a Trading Party can only overwrite volume notifications that they have submitted), and applies the overwrite rules where the ECVN ECVNAA Id matches. This allows a Trading Party to amend the contract volumes waiting a match at any time prior to Gate Closure for the relevant Settlement Period.

2.9 Matching

On receipt of a data file into the database, and after any overwrite for that Trading Party has occurred, the CMP will search for a match amongst the volume notifications for the other Counterparty. On finding an appropriate file, the data files are compared.

In order to find the appropriate file for matching, the CMP should ensure that:

- The ECVNAA Id is the same in both volume notifications (and therefore Counterparty 1 and Counterparty 2 are the same).

- The 'contract reference' (i.e. the ECVN ECVNAA Id for ECVNs and MVRN MVRNAA Id for MVRNs) indicating whether these contract volumes are additive to any previously matched volumes, or are intended to overwrite any previously notified volumes must be the same.

Once this validation has been undertaken, then the CMP will look at the component parts of the volume notifications – i.e. each Settlement Period for the Effective Date(s) contained within the volume notifications. The CMP will then match those where the Effective Date, Settlement Period and contract volumes are identical. These will then be copied to the 'matched volume notification table', and the relevant update undertaken to the screen reporting (see Section 2.14). The CMP must enable matches to be made at Settlement Period level, and allow partial matching of files.

For example:

Counterparty 1 submits a volume notification containing contract volumes for one Settlement Day, and Counterparty 2 submits a volume notification containing contract volumes for three Settlement Days (which include the day notified by Counterparty 1). Providing the notified volumes match at Settlement Period level, the CMP will match all Settlement Periods for the one Settlement Day and will flag the entire data file for Counterparty 1 as matched, and will flag the data file for Counterparty 2 as partially matched, and all Settlement Periods and contract volumes for the one Settlement Day will appear in the matched table(s).

Matching occurs at Settlement Period level, therefore ensuring maximum probability of matches.

2.9.1 Successful Match

Where a successful full or partial match occurs, then the CMP will generate an acceptance to both Counterparties containing:

- the names of both the data files from which the match was taken;

- the Settlement Period(s) and associated contract volumes which have been matched. It should be noted that contract volumes should match to all decimal places (dp), currently 3 dp for volumes and 5 dp for percentages; and

- the deemed date and time of the volume notification submission (which will be defined as the time the second of the two volume notifications arrived with the CMP – and which should therefore match the Received Time for that volume notification).

The matched notification dataflow will contain all the Settlement Periods that have been matched from a relevant pair of datafiles and there will be only one dataflow per match.

Where the Settlement Periods matched span more than one Settlement Day, then the date should be reported with the matched Settlement Periods to ensure that recipient contract Trading Parties are clear on what has been matched. This is represented by the repetition functionality at the Effective Date level[15].

The examples below provide an IDD type view of the potential format for this dataflow. However, it should be noted that this is a representation of the information required and a potential format for the provision of this information and does not represent a requirement for development of the interfaces as specified.

Example ECVN Match Dataflow

Matched ECVN

1	ECVN ECVNAA Id	
1	Deemed Time of ECVN submission	
1	Filename of original submitted ECVN for Counterparty 1 used in match	
1	Filename of original submitted ECVN for Counterparty 2 used in match	
1	Matched Energy Contract Volumes	
	1-*	Effective Date
		1 Settlement Period (1-50)
		1 Energy Contract Volume (MWh)

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[15] The same conventions as those utilised in the IDD and NETA Data File Catalogue have been utilised here to indicate optionality: '1' indicates that the data item/group is mandatory, '0' indicates that it is optional, and the '-*' convention indicates possible repetition, at that level.

Example MVRN Match Dataflow

Matched MVRN

1	MVRN MVRNAA Id	
1	Deemed Time of MVRN submission	
1	Filename of original submitted MVRN for Lead Party used in match	
1	Filename of original submitted MVRN for Subsidiary Party used in match	
1	Matched Metered Volume Reallocation	

        1-*   Effective Date

              1   Settlement Period (1-50)

              0   Metered Volume Fixed Reallocation (MWh)

              0   Metered Volume Percentage Reallocation (%)

Such Acceptance will be generated within 15 minutes of Received Time.

The matched volume notification volumes will be presented to the matched volume notification table(s). Subsequent (matched) volume notifications should be able to overwrite those volumes already held as matched, if required, as defined in the BSC Section P 2.3.5 and 3.3.5[16]. Therefore where volume notifications have been identified as matched, subsequent matches for these Settlement Periods with the same ECVNAA Id and ECVN ECVNAA Id will overwrite notifications for all specified relevant Settlement Periods.

Matched contract volumes will appear in the matched table(s), immediately available for viewing and for further processing. The volumes should carry a timestamp of the deemed receipt time – i.e. the Received Time of the second of the pair of volume notifications.

Matched contract volumes are now available for Gate Closure processing (Section 2.10).

2.9.2 No Match

Where no match is found, then a 'no match' message will be generated to both Counterparties detailing the originator and the filename of the unmatched file, the notification will also contain the filename of the last full or partial match.

The examples below provide an IDD type view of the potential format for this dataflow. However, it should be noted that this is a representation of the information required and a potential format for the provision of this information and does not represent a requirement for development of the interfaces as specified.

1.1.1.1

[16] BSC Section P 2.3.5 and 3.3.5 (ECVN and MVRN respectively) states that where a valid volume notification (the second such notification) is submitted for which the Notification Agent, Energy (From) Account and Energy (To) Account are the same as those for a prior volume notification (the first such notification) which remains in force: (a) if the second notification specifies ... that it is to replace the first notification, the first notification shall cease to be in force with effect from (and shall not be in force for) the first Settlement Period for which the second notification is in force; (b) otherwise, the second notification shall be additional to the first and the first shall ... remain in force.

Example ECVN No Match Dataflow

No Match ECVN

1	ECVNA	Id of Originator
1	ECVN	ECVNAA Id
1		Filename of received ECVN for which no match was found
0		Filename of last matched ECVN for recipient Trading Party

Example MVRN No Match Dataflow

No Match MVRN

1	MVRNA	Id of Originator
1	MVRN	MVRNAA Id
1		Filename of received MVRN for which no match was found
0		Filename of last matched MVRN for recipient Trading Party

The unmatched data file will be placed in the database, immediately available for viewing (Section 2.14), and will be assigned a colour which indicates the unmatched status. This is then available for matching on arrival of subsequent files.

2.10 Gate Closure Processing

At Gate Closure for a Settlement Period, all matched contract volumes, in respect of that Settlement Period, received prior to or at Gate Closure for the Settlement Period (i.e. those in the matched table) will be made available for credit checking within existing ECVAA functionality. As previously stated, the Received Time of the matched notification is deemed to be the Received Time of the second received notification of the pair. Therefore the CMP will look at the Received Time to determine whether the volume notification arrived prior to, or at Gate Closure for the relevant Settlement Period.

Once all volume notifications relevant to the Settlement Period for which Gate Closure has just occurred have been 'passed on' for further processing (i.e. to credit checking), these volume notifications should be removed from the matched table.

For the specific circumstance of rejection due to Level 2 Credit Default, then interaction between the CRA, the credit checking mechanism / indebtedness calculator and the CMP is required. This is in order to comply with the BSC with regards to rejection and refusal on Credit Default grounds: Where the Credit Default Rejection Period is in force[17] (the

1.1.1.1

[17] BSC Section M 3.3.3 (a)(ii) defines this as 'the period from Gate Closure for Settlement Period j+3 until Gate Closure for the third Settlement Period after the first subsequent Settlement Period in relation to which the Credit Cover Percentage for the Trading Party becomes not greater than 90%.'

Indebtedness is equal to, or in excess of, 90% and the 'Permit Notification Rejection' Flag is set to Yes), then any matched volume notifications for the Trading Party in Credit Default, relating to the three Settlement Periods after the one for which Gate Closure has just occurred are passed by the CMP into the credit checking process[18].

2.11 Credit Checking

Where the dual notification process is to exist in parallel with the existing single notification process, or where dual notification is provided by more than one service provider, then Credit Checking at Gate Closure will be undertaken by the Central Services, in order that true Energy Indebtedness values are calculated for each relevant Contract Trading Party. Due to the nature of Credit Checking, it is neither feasible, nor desirable to have more than one system Credit Checking volume notifications at Gate Closure, therefore Credit Checking will continue to occur centrally (Section 5 references the changes required to Central Services). The central Credit Checking process will determine whether there is a requirement to reject volume notifications due to the Credit Default Rejection period being in force for a Trading Party (see Section 2.8), and where this is the case, then the central Credit Checking functionality will generate any necessary rejection.

Once credit checked, contract volumes are aggregated and passed into Settlements, in accordance with the current process.

2.12 Reporting

There are two reports that are provided by the existing process and it is intended to utilise these in the same format and to the same level of detail as currently defined.

2.12.1 End of Day Reporting

An End of Day Notification Report[19] will be generated that provides information regarding what was passed into Credit Checking by the CMP for the Settlement Day just past. This is provided to each Trading Party and should contain the following:

The Settlement Date the data pertains to.

At Settlement Period Level:

ECVN Data – details of each ECVN matched for the Settlement Period, including the ECVN ECVNAA Id, the Id and name of Counterparty 1 and the Energy Account (i.e. Production / Consumption) used in the ECVN, the Id and name of Counterparty 2 and the Energy Account used in the ECVN, the Energy Contract Volume (positive or negative MWh).

MVRN Data – details of each MVRN matched for the Settlement Period, including the MVRN MVRNAA Id, the BM Unit Id the MVRN relates to, the Id and name of the Lead Party and the Energy Account (i.e. Production / Consumption) used in the MVRN, the Id and named

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[18] The credit checking process will determine whether these volume notifications are to be rejected, and will undertake the generation of the relevant rejection to both Counterparties.
[19] This is based on the format of the ECVAA-I014 / E0141.

of Subsidiary Party and the Energy Account used in the MVRN, the Metered Volume Reallocation (percentage and / or MWh).

2.12.2 Forward Contract Reporting

The Forward Contract Report[20] should provide a report for the matched contract volumes and a report for the unmatched (these do not necessarily have to be separate reports, but should indicate which of the forward contracts are unmatched, and which are matched).

This should be sent to each Trading Party and will contain the following:

For each Settlement Day included in the report -

The Settlement Date the data pertains to.

Matched Data:

ECVN Data – details of each ECVN, including the ECVN ECVNAA Id, the Id and name of Counterparty 1 and the Energy Account (i.e. Production / Consumption) used in the ECVN, the Id and name of Counterparty 2 and the Energy Account used in the ECVN, the Energy Contract Volume (positive or negative MWh) for each Settlement Period in the ECVN which has been matched.

MVRN Data – details of each MVRN, including the MVRN MVRNAA Id, the BM Unit Id the MVRN relates to, the Id and name of the Lead Party and the Energy Account (i.e. Production / Consumption) used in the MVRN, the Id and name of Subsidiary Party and the Energy Account used in the MVRN, the Metered Volume Reallocation (percentage and / or MWh) for each Settlement Period in the MVRN which has been matched.

Unmatched Data:

ECVN Data – details of each ECVN, including the ECVN ECVNAA Id, the Id and name of Counterparty 1 and the Energy Account (i.e. Production / Consumption) used in the ECVN, the Id and name of Counterparty 2 and the Energy Account used in the ECVN, the Energy Contract Volume (positive or negative MWh) for each Settlement Period in the ECVN which has not been matched.

MVRN Data – details of each MVRN, including the MVRN MVRNAA Id, the BM Unit Id the MVRN relates to, the Id and name of the Lead Party and the Energy Account (i.e. Production / Consumption) used in the MVRN, the Id and name of Subsidiary Party and the Energy Account used in the MVRN, the Metered Volume Reallocation (percentage and / or MWh) for each Settlement Period in the MVRN which has not been matched.

2.13 Purging

At the end of every Settlement Day all matched contract volumes in the matched table for Settlement Periods already passed, i.e. that were matched after Gate Closure for the relevant Settlement Period and therefore have not been further processed, will be removed from the matched table(s).

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[20] This should be based upon the ECVAA-I022 (E0221).

To provide clarification, where a volume notification contains contract volumes for Settlement Periods already passed at the point of submission, which are matched, because the other volume notification was the same, then these will be matched accordingly, and placed in the matched table after the Gate Closure to which they pertain. Therefore these can be legitimately disregarded.

Unmatched volumes remaining after 7 days (again, a rolling 7 days) will be purged from the database on expiry, thus avoiding performance issues over volumes in the database.

2.14 Database Viewing

The CMP volume notification database will be available for viewing and reporting via a screen based front end[21] by Trading Parties (and Notification Agents), and will be protected by relevant levels of security.

Specifically, a Trading Party will be able to 'see' all volume notifications, at data file level, for which they are a Counterparty, assigned a different colour according to status – for example, one colour indicating an unmatched volume notification, another indicating a partially matched notification and yet another indicating a completely matched volume notification. Trading Parties will also be able to view the volume notification matches at Counterparty, Settlement Period and contract volume level.

The CMP volume notification database will be 'scrapeable' – i.e. specific queries can be invoked by the Trading Party for obtaining information from the database.

The screen based reporting mechanism will also display any Credit Level Default warnings against the relevant Trading Parties, thus alerting the Counterparties of such Trading Parties of the potential for volume notification refusal on credit grounds.

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[21] This screen based front end could form part of the BMRA central service, or could be provided under the BSC via an alternative mechanism.

3   DUAL NOTIFICATION IMPLEMENTATION OPTIONS

There are three implementation options for the introduction of the dual notification process defined in this Requirements Specification:

- Standalone provision of the CMP outside of Central Services;

- Provision of the CMP inside Central Services within the ECVAA system; or

- Provision of the CMP inside Central Services outside of ECVAA.

For the purposes of this document, the requirements have been specified in such a way that the requirements specification applies to all of these implementation options.

Each of these options can be split further as to whether the dual notification is to exist in parallel with the existing single notification process or is to replace it entirely. Again, the Requirements Specification is intended to define the dual notification process in a manner that allows either single and dual in parallel, or dual as a replacement for single.

However, it has been assumed that at least initially the dual and single notification processes will run in parallel and therefore reference has been made to this throughout the specification.

The implementation options under consideration at this time are provision of the dual notification process within Central Services, either outside of ECVAA, or within ECVAA.

4 POTENTIAL CHANGES TO EXTERNAL SYSTEMS

The introduction of a dual notification process within central services has an impact on Trading Parties and Notification Agent systems. This is believed to be the extent of the impact on systems external to the Central Services at this time.

- Where a Trading Party wishes to use the dual notification process, then they will require Notification Agent functionality. In the implementation of the dual notification process, Notification Agents are not referenced specifically, as this functionality is assumed to be an inherent part of the Trading Party. Therefore a significant part of the implementation may be that response flows are sent to both Notification Agents only, as they represent the Trading Party, rather than to both Notification Agents and both Counterparties.

  Where a Trading Party does not wish to avail themselves of this functionality, then the single notification process will remain open to them. However, it should be noted that in the longer term, if Trading Parties wish to utilise the dual notification process to the exclusion of single notification, then a mechanism will be required for determining, on receipt by the CMP, which volume notifications are single volume notifications and implicitly already matched. For example, a flag in the interface, in conjunction with a valid ECVNAA Key, could indicate that the contract volumes so notified are to be placed into the matched table on receipt. However, for the purposes of this Requirements Specification, it is assumed that such Trading Parties will utilise the existing process.

- Where the dual notification process is not provided within ECVAA systems, then there is a potential for a requirement for a Trading Party to have separate communications with the provider of the dual notification.

  It is possible for a Trading Party to utilise the same communications mechanism with the dual notifications provider as that currently utilised for communications with the central services. However, the existing communications mechanism is a proprietry piece of software. There will be, therefore, an inherent cost that may render this option non viable, hence there may be a potential requirement for an additional communiation mechanism.

- Under dual notification only 7 day forward notifications are allowed. Therefore Trading Parties wishing to notify longer periods should use the single notification process. Trading Parties wishing to use the dual notification process may be required to amend their Notification Agent systems to limit volume notifications to 7 days only.

- The requirement for the ECVNAA Id / MVRNAA Id to be the same in both volume notifications to ensure a match may require modification to existing Notification Agent systems to enable this Identifier to be utilised in such a way.

- The requirement, or not, for the use of the ECVNAA Key / MVRNAA Key may require modification to existing Notification Agent systems to negate the requirement for inclusion of this Key in the interfaces.

5 POTENTIAL CHANGES TO CENTRAL SERVICES

The introduction of a dual notification process within Central Services may have an impact on central services other than that defined in the Requirements Specification. The extent of the impact is governed by the implementation of the dual notification process, i.e. whether the dual notification process is implemented within ECVAA, in which case the impact is as defined in the Requirements Specification, or whether the dual notification process is to be implemented outside of ECVAA within the Central Service.

The following potential changes are required to Central Services in addition to those already defined in the requirements specification, **where dual notification is implemented outside of Central Services**:

- CRA and ECVAA functionality will require amendment to support the passing of information between CRA and ECVAA and the CMP. It is currently envisaged that the Notification Agent Authorisation process will continue as currently specified within ECVAA, and that the information regarding the Authorisation will be passed to the CMP for validation purposes. The CMP will also require registration information from CRA for validation purposes. Therefore the sending of such information on a daily and adhoc (i.e. where data has changed) basis needs to be factored into any CMP implementation.

- ECVAA functionality will have to be amended to reflect that contract volumes being submitted to the credit checking process have been previously business validated and therefore should be passed directly into the credit checking process as valid contract volumes.

- ECVAA Delay functionality may need to be amended to ensure that where the CMP / dual notification fails, that the credit checking process may have to be suspended / run for the dual notification contract volumes only, as the dual notification process will come under the Balancing and Settlement Code with regards to such failures and therefore there is a requisite level of interaction between the two systems, where there is a failure. Conversely, where ECVAA fails, then there will have to be a mechanism for storing contract volumes passed from the matching process until ECVAA is restored, again catered for under the BSC.

- Manual restoration / rectification processing within ECVAA may have to be amended to enable changes to contract volume data received from the dual notification process as a result of an upheld Trading Query / Dispute.

- ECVAA functionality may require amendment to take into account the volumes of volume notifications being received from the CMP dual notification at each Gate Closure.

APPENDIX A DUAL NOTIFICATION PROCESS SPECIFICATION

This Appendix contains the process specification, as extracted from version 2.0 of the document 'MP4 Modification Proposal: Dual Notification Process Specification'. This is based upon existing ECVAA Service functionality and therefore references existing interfaces and processing. This extract is intended to provide a key for the context of the dual notification process, by comparison to the existing functionality.

This extract is provided here for information only and has been superseded by the Requirements Specification detailed in the previous sections of this document.

Authorisation Process

The existing Notification Agent Authorisation process, as defined in BSCP71 (ECVNA and MVRNA Registration, Authorisation and Termination) and Section P of the Balancing and Settlement Code, should be retained under dual notification. It should be determined between the Counterparties which Notification Agent is to be deemed to be the main notifier, and it is this Notification Agent which should be Authorised (see Volume Notification) in accordance with BSCP71.

This does not preclude both Notification Agents being Authorised for a pair of Counterparties, if the Counterparties so wish, but the process defined in 2.2 requires agreement as to which ECVNAA Id is to be used for each pair, or set, of volume notifications.

Volume Notification

The existing interfaces – ECVAA-I004 (E0041) and ECVAA-I005 (E0051), for ECVNs and MVRNs respectively, will be retained under dual notification.

Where Counterparties have agreed to utilise the dual notification process for submission of volume notifications then both Notification Agents will provide the following information in each interface:

Energy Contract Volume Notifications

- N0080 – ECVNAA Id, should be populated with the ECVNAA Id of the main notifier ECVNA. This enables a match to be identified between the two notifications.

- N0297 – ECVNAA Key, will not be read by the system if received into the CMP, and therefore could be omitted from the interface to indicate that this is a dual notification.

- N0310 – ECVN ECVNAA Id, comprises the ECVNAA Id followed by a reference code. This data item can continue to be used as currently – i.e. this will indicate whether the contract volumes notified are overwrite or additive to those previously submitted by that Trading Party.

Metered Volume Reallocation Notifications

- **N0147 – MVRNAA Id**, should be populated with the MVRNAA Id of the main notifier MVRNA. This enables a match to be identified between the two notifications.

- **N0148 – MVRNAA Key**, will not be read by the system if received into the CMP, and therefore could be omitted from the interface to indicate that this is a dual notification

- **N0310 – MVRN MVRNAA Id**, comprises the MVRNAA Id followed by a reference code. This data item can continue to be used as currently – i.e. this will indicate whether the contract volumes notified are overwrite or additive to those previously submitted by that Trading Party.

Volume Notifications submitted under the dual notification process should be limited to a forwards notification of seven days (a rolling seven days) only. Counterparties wishing to notify further forwards should utilise the single notification process[22]. Seven days was chosen as the most appropriate length of time given current notification preferences and Trading Party requirement to submit weekly profiles and ensure matches for the week ahead.

Receipt of Volume Notifications

On receipt of the volume notification, the CMP system will respond by sending a response file. This response file – either a Positive Acknowledgement (ACK) or Negative Acknowledgement (NACK), will indicate whether the data file received has been validated as syntactically correct. The ACK / NACK should contain the following:

- Received Time – the time the message being acknowledged was received, in GMT

- Response Time – the time the response message was generated by the receiving Party, in GMT

- File Name – the name of the file that the response relates to

- Response Code – code indicating the nature of the acceptance / rejection

- Response Data – additional data required to help in fixing any problem

The acknowledgement should be based upon ECVAA-I019 (the existing acknowledgement interface).

Where a NACK is generated, no further action will be taken regarding loading the volume notification.

Where an ACK is generated, then within [n[23]] minutes of the Received Time defined in the ACK, the data file should be business validated including the requisite generation of a business acceptance / rejection.

The business validation should accord with that defined in Section P of the BSC and with that defined in ECVAA-F005 and ECVAA-F006 in the ECVAA URS (however, where there are discrepancies between the defined validation criteria, that defined in the BSC should take precedence)[24]. It should be noted that due to the usage of the ECVNAA Key and MVRNAA Key, and ECVNAA Id and MVRNAA Id under dual notification (as defined in 'volume notification'), validation criteria will have to be set accordingly and this difference recognised in any approach to validating data under dual notification.

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[22] Assuming that the dual notification process is optional, however, this optionality is out of scope of this specification, as it does not affect the process defined here.
[23] Currently defined within ECVAA as fifteen minutes from receipt. This could potentially be shortened but is not to be to be longer than the current 15 minutes.
[24] Where the CMP is provided outside of ECVAA, then it should be ensured that the validation requirements are consistent (where appropriate) between the CMP and the ECVAA system.

For the specific circumstance of refusal and associated rejection due to credit default, then interaction between the CRA, the credit checking mechanism / indebtedness calculator and the business validator is required. This is in order to comply with the BSC with regards to rejection and refusal on credit default grounds: Where the Indebtedness is equal to, or in excess of, 90% and the 'Permit Notification Rejection' Flag is set to Yes, then any volume notifications which increase indebtedness for a Trading Party should be refused and a rejection generated.

It is proposed that the screen based reporting mechanism (see 'Database Viewing') detail any Credit Level default warnings against the relevant Trading Parties, thus alerting the Counterparties of such Trading Parties of the potential for volume notification refusal on credit grounds.

Where the received data file fails such validation, then a business rejection should be generated to the originator of the data file, according to defined service level timescales. The business rejection should utilise the format specified for ECVAA-I009 (E0091) and ECVAA-I010 (E0101), with the addition of a data item detailing the filename of the rejected data file[25]. Where such a rejection is generated, then no further action should be taken with regards to further loading / processing of the data file.

Where the data file passes such validation, then a business Acceptance should be generated to the originator of the data file. Such acceptance should be based on the E0091 and E0101, with the relevant fields indicating the Settlement Periods and contract volumes which have been accepted, and the filename that the acceptance relates to. It would be advisable to retain E0091 and E0101 file names for rejections, to differentiate these from acceptances (as rejections require correction and resubmission), therefore it is proposed that the same format as the E0091 and E0101 be utilised for acceptances with a new filename (for example, E0231 and E0241 for ECVNs and MVRNs respectively), thus minimising impact on Trading Parties.

Where the data file passes business validation, then it is made available for further processing.

Receipt of Data File into CMP Database

On successful validation of the data file (including the requisite generation of business level acceptance), the data file will be placed into the CMP database. The CMP will undertake a comparison of unmatched or partially matched data files with the same ECVNAA Id submitted by that Trading Party (i.e. a Trading Party can only overwrite volume notifications that they have submitted), and applies the overwrite rules where the ECVN ECVNAA Id matches. This allows a Trading Party to amend the contract volumes waiting a match at any time (this may also precipitate a match where the notifications remain unmatched as a result of erroneous contract volumes between pairs).

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[25] This is only a suggestion at this time. The ability to identify the offending data file is an issue currently under review for the existing process and it is noted that any change to the ECVAA-I009 / ECVAA-I010 to effect resolution of this issue should be fed into this specification.

Database Viewing

The volume notification database should be available for viewing and it has been proposed that this takes the form of a screen based front end, listing all received notifications with assigned colour coding according to the current status of the volume notification[26].

In detail, a Trading Party should be able to 'see' all volume notifications, at data file level, for which they are a Counterparty, assigned a different colour according to status – for example, one colour indicating an unmatched volume notification, another indicating a partially matched notification and yet another indicating a completely matched volume notification. Trading Parties should then be able to view the volume notification matches at Counterparty, Settlement Period and contract volume level.

Therefore an inherent requirement for any dual notification implementation is a real time reporting front end, which indicates dynamically the contract position and volume notification status at any point in time.

Matching

On receipt of a data file into the database (immediately after any overwrite has occurred), the CMP will search for a match amongst the volume notifications for the other Counterparty. On finding an appropriate file, the data files are compared.

What Constitutes a Match?

- The ECVNAA Id is the same in both volume notifications (and therefore Counterparty 1 and Counterparty 2 are the same). It should be noted that this may require modification to existing ECVNA systems to enable this Identifier to be utilised in such a way.

- The indication as to whether these contract volumes are additive to any previously matched volumes, or are intended to overwrite any previously notified volumes must be the same.

Once this validation has been undertaken, then the CMP will look at the component parts of the volume notifications – i.e. each Settlement Period for the Effective Date(s) contained within the volume notifications. The CMP will then match those where the Effective Date, Settlement Period and contract volumes are identical. These will then be copied to the 'matched volume notification table', and the appropriate colour assigned for on screen reporting. This enables matches to be made at Settlement Period level, and allows partial matching of files.

For example:

Counterparty 1 submits a volume notification containing contract volumes for one Settlement Day, and Counterparty 2 submits a volume notification containing contract volumes for three Settlement Days (which include the day notified by Counterparty 1). Providing the notified volumes match at Settlement Period level, the CMP will match all Settlement Periods for the one Settlement Day and will flag the entire data file for Counterparty 1 as matched, and will flag the data file for Counterparty 2 as partially

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[26] This screen based front end could form part of the BMRA central service, or could be provided under the BSC via an alternative mechanism.

matched, and all Settlement Periods and contract volumes for the one Settlement Day will appear in the matched table(s).

Therefore it can be seen that matching occurs at Settlement Period level, therefore ensuring maximum probability of matches. Comparison of the matched table with the files submitted will indicate non matches, and this will be between Counterparties to resolve. However, with the dynamic real time reporting, the Trading Parties should be able to identify unmatched volumes and resolve them close to real time.

The same rules should apply to overwrite and additive volume notifications as at present, i.e. once matched subsequent (matched) volume notifications should be able to overwrite those volumes already held, if required. Therefore it is proposed that where volume notifications have been identified as matched, that any subsequent matches for these Settlement Periods with the same ECVNAA Id and ECVN ECVNAA Id be assumed to be overwrite notifications.

Successful Match

Where a successful full or partial match occurs, then the CMP will generate an acceptance to both Counterparties containing:

- the names of both the data files from which the match was taken

- the Settlement Periods and associated contract volumes which have been matched. It should be noted that contract volumes should match to all decimal places (currently 3 dp for volumes and 5 dp for percentages); and

- the deemed time of the volume notification submission (which will be defined as the time the second of the two volume notifications arrived with the CMP – and which should therefore match the Received Time in the ACK for that volume notification).

Such Acceptance should be generated within 15 minutes of Received Time (allowing for business validation and then matching time).

The matched volume notification volumes will be presented to the matched volume notification table(s). Where these are overwrites to previously matched contract volumes for the Counterparties, then the relevant contract volumes already present in the table will be overwritten as appropriate (i.e. on a Settlement Period by Settlement Period basis).

Matched contract volumes will appear in the matched table(s), immediately available for viewing and for further processing. The volumes should carry a timestamp of the deemed receipt time – i.e. the Received Time of the second of the pair of volume notifications.

No Match

Where no match is found, then a 'no match' message will be generated to both Counterparties detailing the originator and the filename of the unmatched file, the notification will also contain the filename of the last full or partial match.

The unmatched data file will be placed in the database, immediately available for viewing, and will be assigned a colour which indicates the unmatched status. This is then available for matching on arrival of subsequent files.

Gate Closure Processing

At Gate Closure for a Settlement Period, all matched contract volumes received prior to or at Gate Closure for the Settlement Period (i.e. those in the matched table) will be made available for credit checking. As previously stated, the Received Time of the matched notification is deemed to be the Received Time of the second received notification of the pair. Therefore the CMP will look at the Received Time to determine whether the volume notification arrived at Gate Closure for the relevant Settlement Period.

Once all volume notifications relevant to the Settlement Period for which Gate Closure has just occurred have been 'passed on' for further processing (i.e. to credit checking), these volume notifications should be removed from the matched table.

An additional factor to be considered at this point, is the obligations for processing where Trading Parties are in Level 2 Credit Default. Where a Trading Party is deemed to be in Level 2 Credit Default (i.e. their Indebtedness is equal to, or exceeds 90% and the Permit Notification Rejection Flag is set to Yes), then under Section M of the BSC, at Gate Closure for a Settlement Period, all components of volume notifications that apply to the Settlement Period that is three Settlement Periods after the one for which Gate Closure has just occurred (i.e. 5 hours from the current Gate Closure), and which increase Indebtedness for the Trading Party should be refused and a rejection generated.

For these BSC obligations to be met, there is a requirement for a similar interaction to that required in the Business Validator, between CRA, the credit checking mechanism / indebtedness calculator and this part of the process. The most appropriate way to achieve these obligations, is where a Trading Party meets these criteria, that at Gate Closure for each Settlement Period (where these criteria are met), any matched volume notifications for the three Settlement Periods after the one for which Gate Closure has just occurred are passed into the credit checking process, where the relevant rejections are made, as currently defined in the existing process.

Reporting

There are two reports that are provided by the existing process and it is intended to utilise these in the same format and to the same level of detail as currently defined.

The ECVAA-I014 (E0141) end of day Notification Report should provide information regarding unmatched volumes at Settlement Period level.

The ECVAA-I022 (E0221) Forward Contract Report should provide a report for the matched contract volumes and a report for the unmatched (these do not necessarily have to be separate reports, but should indicate which of the forward contracts are unmatched, and which are matched).

Purging

At the end of every Settlement Day all matched contract volumes in the matched table for Settlement Periods already passed, i.e. that were matched after Gate Closure and therefore have not been further processed, should be removed from the matched table(s).

For example, where a volume notification contains contract volumes for Settlement Periods already passed at the point of submission, which are matched, because the other volume notification was the same, then these will be matched accordingly, and placed in the

matched table after the Gate Closure to which they pertain. Therefore these can be legitimately disregarded.

Unmatched volumes remaining after 7 days (again, a rolling 7 days) will be purged from the database on expiry, thus avoiding performance issues over volumes in the database.