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Modification Proposal P103 – 'Respecification of Trading Data' Requirements Specification

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Version 0.2 is issued to SSMG prior to consultation.

Version 1.0 issued for BSC Party, non BSC Party and BSC System Consultation and Impact Assessment from relevant BSC Agent.

d Changes Forecast

None

e Related Documents

Reference 1	Modification Proposal P103 'Respecification of Trading Data' (7 October 2002)
Reference 2	Initial Written Assessment of Modification Proposal P103 'Respecification of Trading Data' (P103IR, 10 October 2002)

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1 INTRODUCTION

1.1 Background and Scope

This document, relating to Modification Proposal P103 'Respecification of Trading Data' (P103) (Reference 1), forms the basis for the consultation and impact assessment of the implementation of P103. This document defines the requirements for implementation of the Modification Proposal without any evaluation or assessment of the Modification Proposal. The document also forms a vehicle to identify the issues associated with P103.

P103 was raised by Slough Energy Supplies Ltd on 7 October 2002, and the Initial Written Assessment for P103 (Reference 2) was considered by the Balancing and Settlement Code Panel ('the Panel') at its meeting of 17 October 2002. The Panel agreed to submit P103 to the Assessment Procedure to be conducted by the Settlement Standing Modification Group (SSMG). The Panel agreed that an Assessment Report would be presented to them at their meeting on 16 January 2002.

P103 proposes to extend the functionality provided by the Balancing Mechanism Reporting Agent (BMRA) in relation to the Balancing Mechanism Reporting Service (BMRS). In particular, P103 seeks to extend both the content and retention period for information currently provided on the BMRS as well as providing additional tools to allow users to query the data. Such tools referred to within the Modification Proposal include interfaces to Microsoft® Access® to enable manipulation of the data in a more user friendly manner and transparent manner. The proposal also seeks to introduce a new interface to the BMRS, from the Settlement Administration Agent, to ensure that data items displayed there, such as Indicative Energy Imbalance Prices, are updated in line with Reconciliation Runs that are carried out in accordance with Section U2 of the Code.

1.2 Purpose and Structure of Document

The primary purpose of this document is to identify the requirements for P103 and allow respondents to the consultation and impact assessment. The consultation questions are appended in Attachment 1. The results of this consultation will be used to inform the assessment of P103 by the SSMG. In particular the SSMG have expressed concern about the way in which the costs of providing such an enhanced reporting service would be recovered. The consultation therefore seeks to determine whether the facilities introduced as a result of implementing P103 would actually be used by market participants.

1.3 Glossary

The following acronyms have been used throughout this document (excluding acronyms used in the Technical Glossary):

BMU Balancing Mechanism Unit

BMRA Balancing Mechanism reporting Agent

SSMG Settlement Standing Modification Group

SAA Settlement Administration Agent

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2 SPECIFICATION FOR MODIFICATION PROPOSAL P103

2.1 Requirements Specification Overview

P103 seeks to a number of changes to the content and availability of data displayed on the BMRS. In particular P103 suggests:

- Indicative data, currently displayed on the BMRS, should be updated in accordance with "subsequent Reconciliation Runs" to show the actual values calculated within those runs;
- The data retention period for data displayed on the BMRS should be increased from the current 12 months after publication and a data archive and retrieval service should be introduced to recover data that has been archived;
- Tools should be provided to allow users to perform simple queries on data held on-line, for example to obtain daily averages / totals by company;
- Users of the BMRS are allowed to retrieve data for multiple Balancing Mechanism Units (BMUs) and data for multiple Settlement Days;

The following additional data items have been requested to be displayed on the BMRS.

- Half Hourly Transmission Loss Multiplier Data;
- Half Hourly Residual Cashflow value in £/MWh;
- Half Hourly metered output by BM Unit;
- Net imbalance position by Party account;
- Net system imbalance before NGC's non balancing actions¹;
- Providing identifiers to accepted BM Trades that are arbitrage trades; and
- Identifiers for each bid, offer and acceptances which have been tagged as included in or excluded from the Energy Imbalance Price calculations.

Taking each of these requirements in turn, the remainder of this Section of the document provides a more detailed description of the requirements and how each requirement could be met.

The individual requirements referred to above have been categorised into four main categories:

- Requirement 1: Update data in line with Settlement Timetable;
- Requirement 2: Data retention, archiving and retrieval;
- Requirement 3: Additional data querying facilities; and
- Requirement 4: Additional data requirements.

¹ It has been assumed that this data requirement refers to the Net Imbalance Volume as introduced by the implementation of Proposed Modification P78.

2.2 Requirement 1: Update Data in line with Settlement Timetable

P103 suggests that data, currently displayed on the BMRS should be updated in line with the Settlement Timetable.

2.2.1 Current Reporting

Figure 1 below illustrates the current reporting regime in relation to forecast data, passed to the BMRA in accordance with paragraph U2 of the Balancing and Settlement Code ('the Code'), indicative data and data calculated as a result of all Settlement Runs carried out in accordance with Section U of the Code.

The figure shows time progressing from left to right. The time period shown in the diagram is from the day immediately prior to any Settlement Period, through the relevant Settlement Period, Settlement Runs (Interim Information (II), Initial Settlement Run (SF) R1, R2 and R3 through to the Final Reconciliation Run (RF)). Activities associated with Parties, the BMRA or SAA are identified are shown to the right of the relevant Party or BSC Agent. The various Settlement Runs are shown as vertical lines as time progresses.

KEY Available to Parties Broadcast of data via TIBCO Internet Publication on request TIBCO Broadcast Broadcast of data via Interne Settlement Report Settlement Report Settlement Report SAA Internet BMRA Minimum Data Retention Period TIBCO Broadcas **Parties** em Indicative Data Forecast Settle Information Time Run Run-Run Run Run 22 33 **R**1

Figure 1 – Illustration of the current reporting with respect to the BMRA and SAA

The diagram shows that forecast data published by the BMRA, at the day ahead stage (represented by the area to the left of the Settlement Period), on both the High Grade Service via the TIBCO interface (represented on the figure by a dark green arrow), and via the Internet by the BMRA (represented by a red arrow).

BSC Parties either receive the relevant TIBCO messages over the High Grade Service, allowing them to store and utilise the raw data relatively easily within their own IT systems, or they interrogate the Low Grade Service web site (www.bmreports.com) to retrieve data

they require on an ad hoc basis. It should be noted that any person with an Internet browser can view the data provided on the BMRS Low Grade Service².

The figure shows that within 45 minutes³ of the end of the Settlement Period, indicative data, as calculated by the BMRA, is made available to BSC Parties using both mechanisms described above (i.e. Internet publication and TIBCO Broadcasting). The diagram also shows that this BMRA data must be retained for a 12-month period⁴ from the date it is published.

In practise data has been retained for longer than the minimum period and data has not yet been removed from the BMRS because it is older than the minimum retention period. Following the publication of Indicative Data for a Settlement Period, the BMRA does not update this data in line with Settlement Runs carried out in accordance with the Settlement Calendar or Dispute Runs carried out at any other time. As part of the impact assessment undertaken by the BSC Agent (ie BMRA and Settlement Administration Agent (SAA)) in relation to this requirements specification, the BSC Agent is asked to confirm the likely timetable for deleting data from the BMRA that relates to Settlement Dates older than 12 months.

Following each Settlement Run, BSC Parties can, on request, receive copies of the System Operator variant of the Settlement Report in addition to the variant of the report that applies only to BSC Parties. The structure and contents of the System Operator variant of the Settlement Report SAA-I014: Settlement Report, sub-flow 2 (S0142) is contained within Annex 1 of this document. This report is currently distributed by ELEXON to any Party on request via email and following the implementation of CP712, "Transmission Company Sub-flow SAA-I014 Availability", will make the SAA-I014: Settlement Report, sub-flow 2 (S0142), available to Parties via the BMRS High Grade and BMRS Low Grade Services for a seven-day period.

2.2.2 Updating data In line subsequent Settlement Runs

The requirement identified within P103 states that the data should be updated in line with subsequent "Reconciliation Runs". The SSMG have checked with the P103 Proposer and confirmed that this requirement was also intended to refer to the Interim Information (II) Run and the Initial Settlement Run (SF) in addition to the Reconciliation Settlement Runs. The remainder of this document will therefore use the term Settlement Runs to define all Settlement Runs occurring between the II and RF Runs.

This Proposal would enable BSC Signatories and non BSC Signatories to access data that is not currently available on the BMRS. It should be noted that a "Best View" price is currently published on the BSC Website (www.elexon.co.uk). It should also be noted that there is in fact no Code obligation to publish these prices on the BSC Website.

There are two approaches to how data could be updated in line with Settlement Runs could be provided. Approach 1 deals with the case where data displayed on the BMRA is overwritten at subsequent Settlement Runs whereas Approach 2 would make data available at subsequent Settlement Runs in addition to the data stored on the BMRS. Approach 1 is illustrated in figures 2 and 3.

² References throughout this document relating to BMRS Low Grade Service and BMRS Internet web site refer to www.bmreports.com

³ As defined in paragraph U2.3.3

⁴ As defined in paragraph U2.2.4

Approach 1

Figure 2 and 3 shows how the distribution of data, as shown in figure 1, might change if data were to be updated at each Settlement Run as a result of P103 being implemented. Figure 2 shows data that is updated at each Settlement Run, published on the BMRS (ie Low Grade Service ie Internet). The figure illustrates the new interface required between the SAA and BMRA to receive the Settlement Report (SAA-I014: Settlement Report, sub-flow 2 (S0142)). The figures use the same key as used for figure 1.

The transmission of the Settlement Report (SAA-I014: Settlement Report, sub-flow 2 (S0142)) from the SAA to the BMRA is shown using a turquoise arrow and the subsequent publication of the relevant data items on the BMRS (Low Grade Service ie Internet) is shown using a dashed red arrow. The Settlement Report (System Operator variant) contains the necessary data items that are to be updated in accordance with the Settlement Run timetable and required to be displayed on the BMRS

Figure 2 shows that for a given Settlement Period/Day, data previously available on the BMRS (i.e. indicative or forecast data) that has been updated is no longer available (represented by a grey arrow with a Red 'X'). This approach to implementing requirement 1 means that only the latest information would ever be displayed on the BMRS.

The diagram does not attempt to show any additional data that may need to be sourced, as a result of the implementation of P103 although it is not believed that this will be a significant issue (See Requirement 4).

KEY New Data flow Available to Parties ■ Broadcast of data via TIBCO Internet Publication to BMRA on request Additional Internet Publication of data TIBCO Broadcast Broadcast of data via Internet from Settlement Report at each Reconciliation Run Settlement Report Settlement Report Settleme Report Settleme Report SAA Internet **BMRA** Publication TIBCO Broadcast Settlement **Parties** ndicative Information Time Run Run-Run Run Run Minutes Run **R**3 **R**1

Figure 2 - Update of BMRA data in line with Interim Information Run - Approach 1

One issue with this approach is that data displayed at the RF Run will relate to a Settlement Day that is in excess of the data retention period as specified in Section U of the Code (i.e. 12 months).

3

12

KEY New Data flow Available to Parties Broadcast of data via TIBCO Internet Publication to BMRA on request Additional Internet Publication of data TIBCO Broadcast Broadcast of data via Internet from Settlement Report at each Reconciliation Run Settlement Report Settlement Report Settlement Report Settlemer Report Settlemer Report Settleme Report SAA Internet Publication **BMRA** TIBCO Broadcas Settlement **Parties** Indicative Forecast Data Time Run Run Run-Run Minutes_ Run Months Run

Following this principle through the Settlement Runs, Figure 3 shows the approach extended to the Final Reconciliation Run.

Figure 3 Updates to Data Carried Out at each Settlement Run – Approach 1 Approach 2

Approach 2 differs from Approach 1 in that the data items that are provided to the BMRA as a result of the subsequent Settlement Runs do not overwrite the previous information relating to the Settlement Period but are added to the data available to be displayed by the BMRS. This enables data items relating to a given Settlement Period that are subsequently updated as part of the Settlement calculations, to be viewed at any time prior to its eventual archiving/deletion.

This approach is illustrated in figure 4 where all copies of data items updated at each Settlement Runs (shown as dashed red arrows) are still available for viewing by users of the BMRS. This will allow users to interrogate the BMRS at any time (prior to the end of the data retention period specified in the Code) prior to any data archiving/deletion.

As a result of this, variables that are updated with new data being published on the BMRS (Low Grade Service ie Internet) by the BMRA being shown as a dashed red arrow. The diagram does not attempt to show any additional data that may need to be sourced as a result of the implementation of P103.

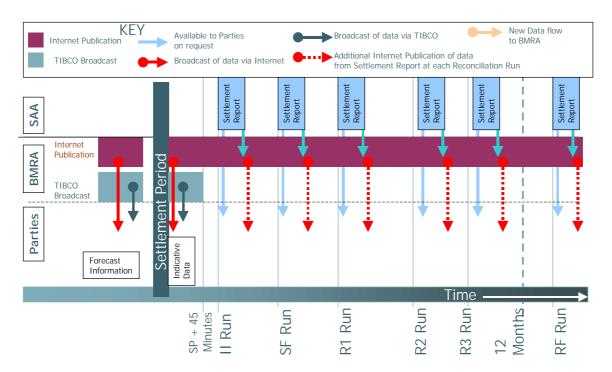


Figure 4 - Reporting of Settlement Data following the introduction of P103 Approach 2

Figure 4 shows only data being updated on the low grade BMRS Service and that within Approach 2, there is no requirement to rebroadcast updated TIBCO messages for this data at the time of subsequent Settlement Runs (i.e. it is assumed that only the Low Grade service will be continually updated as the data updates are available to Parties via the System Operator variant of the Settlement Report).

The BMRS will therefore allow a history of changes that have occurred to data at each Settlement Run to be displayed. This will enable a user to see a complete history of the variations in Indicative Data through to the Final Reconciliation Run.

It is assumed that updates to the data displayed on the BMRS will also be required as a result of Dispute Runs carried out.

With regard to the timing of publication of the data on the BMRS; It is assumed that new data, arising from the Settlement Runs will be published within one working day of the additional data being sent by the SAA to the BMRA to reduce the impact on the BMRA publishing data on a near real time basis for Settlement Periods that have just completed. This assumption was validated by the SSMG at their meeting on 11 November 2002. The wording of the Modification Proposal only provides examples of two data items that are to be updated in line with timetabled Settlement Runs. The Proposal however does use these as an example of the sort of data that could be updated in line with the Settlement timetable.

The SSMG discussed both approaches, 1 and 2, at their meeting on 11 November 2002 and concluded that both approaches should be included within any consultation and impact assessment carried out by Parties and BSC Agents.

A further issue exists in relation to data that is confidential to BSC Parties. It is anticipated such data will be made available only to BSC Parties via a private area of the BMRS web site.

The BMRA is currently required to calculate, store and publish on-line, derived values for each Settlement Period within 45 minutes from the end of the Settlement Period. The list below shows the list of data items that are derived by the BMRA and subsequently displayed on the BMRS.

- Indicative Accepted Offer Volume
- Indicative Accepted Bid Volume
- Indicative Period BM Unit Total Accepted Offer Volume
- Indicative Period BM Unit Total Accepted Bid Volume
- Indicative Period BM Unit Offer Cashflow
- Indicative Period BM Unit Bid Cashflow
- Indicative System Total Accepted Offer Volume
- Indicative System Total Accepted Bid Volume
- Indicative System Total Un-priced Accepted Offer Volume
- Indicative System Total Un-priced Accepted Bid Volume
- Indicative Total Accepted Priced Offer Volume
- Indicative Total Accepted Priced Bid Volume
- Indicative System Buy Price
- Indicative System Sell Price

At their meeting on 11 November 2002, the SSMG confirmed the data items above as those which should be updated in line with Settlement Runs. Respondents to the consultation are requested to identify any further data items that they believe should be updated in line with the Settlement Runs.

2.3 Requirement 2 – Data Retention, Archiving and Retrieval

P103 suggests that the current data retention period of 12 months from publication of the data, as specified in Section U of the Code and within the BMRS User Requirements Specification (URS), be extended to an as yet unspecified value.

Figure 5 provides a simplified representation of figures 1 - 4, on a longer time period, modified to show the data retention periods for both forecast data and indicative data as updated by subsequent Settlement Runs.

The figure shows and is aimed at showing the data retention period to be adopted by the BMRA, were the current limit of 12 months to be used for the period beyond the Final Reconciliation Run. The key and format of the diagrams remains the same as figures 1 - 4.

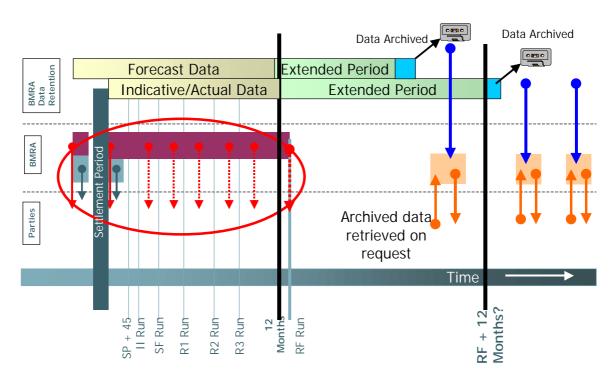


Figure 5 – Proposed extension to Data Retention Period and Archiving Requirements

The diagram shows the existing principle of data being retained for 12 months after the publication date on the BMRA (yellow bar) whilst the green bars represent an extended retention period over that which currently exists (i.e. 2 months from the Settlement Day to which the data relates), represented in the figure by a green bar. Following the data retention period it is proposed that the data be archived and made available to on request (shown by the blue and orange arrows)

The diagram highlights a number of issues associated with this requirement that need to be addressed during the progression of P103 through the Assessment Procedure.

- Duration of data retention;
- Duration of availability of archived data;
- Availability of, and costs for provision of data archive service;
- Mechanism for delivery of data retrieved from archive; and
- Interaction with Modification Proposal P107.

If Requirement 1, as outlined within this document were to be implemented, it could be argued that it would not be worthwhile unless the period of time that data was available was sufficient to allow comparisons of data to be made throughout the Settlement Run timetable. This requirement may be seen to allow any parties (whether BSC Signatories or not) who have chosen not to use the High Grade Service, access to information which could be used in the negotiation and management of contracts with counterparties. It should be noted that access to the High Grade Service is available to all Parties. It should also be noted that the Proposer of P103 suggests that there may be financial reasons or resource issues why some Parties have not taken up the option of using this service.

2.3.1 Requirement 2, Issue 1 – Duration of Data Retention

What is the period of time for extended data retention prior to the data being archived? The Code currently states that data is retained on the BMRS for a period of 12-months after:

- (a) the Settlement Day to which such data relates; or
- (b) in the case of forecast data, the day on which such data was provided.

The SSMG believe that it would be appropriate for this data retention period to be extended beyond the date that it is required to be retained on the BMRS. The SSMG however did not choose to indicate a preferred timescale at this stage and concluded to await the views of consultation respondents in relation to the consultation.

Figure 5 suggests that it may be appropriate to retain all data updated throughout the Settlement Runs for a period of 12 months or more following the Final Reconciliation Run (i.e. 26 months after the Settlement Day to which the data relates) however, this may depend on whether approach 1 or 2 is used to satisfy the requirement to retain data and the costs provided by the BSC Agent for undertaking this activity. The SSMG concluded that it would be appropriate to ask the BSC Agent to confirm the cost of extending the retention of data for each successive 12-month period beyond the current retention period.

It is also important to note that Modification Proposal P107 is also seeking to define the data retention period for data held by each BSC Agent. It is noted that the some BSC Agents currently have data retention requirements of 28 months. It may therefore be appropriate that the BMRA also confirms a cost for retaining the data for exactly 28 months.

2.3.2 Requirement 2, Issue 2 – Duration of Availability of Archived Data

Once data has been removed from the BMRS it is proposed that it could be archived for a further period of time. The SSMG confirmed that the BSC Agent should be requested to provide a cost for providing this service were the data to be retained in a data archive for 5 years following the date on which it was archived. Respondents to the consultation are requested to identify whether they anticipate using this archive service.

2.3.3 Requirement 2, Issue 3 - Availability of, and Costs for Provision of Data Archive and Retrieval Service

Once data has been archived it would seem appropriate to consider who should have access to the data that has been archived, how it should be retrieved and how should the costs of the development of the data archive and retrieval service should be borne.

The data archive service has the potential to benefit all BSC Parties and therefore the SSMG concluded that its development should be funded centrally were it to be implemented. This view was consistent with the view taken on the initial development of the BMRS.

With regard to the data retrieval, additional development cost will be incurred as a result of the introduction of this service together with further operational costs each time the retrieval service is used. The data retrieval service may also be used by non Parties and as such it may be appropriate for the costs of providing this ongoing service to be incurred by

the users of this service. The SSMG believed that the BSC Agent should be asked for a likely cost per use of the data retrieval service.

2.3.4 Issue 4 - Mechanism for Delivery of Data Retrieved From Archive

The mechanism by which the data will be retrieved will require amendments to the BSC Service Description for the BMRA and possibly the introduction of a new Balancing and Settlement Code Procedure (BSCP) to allow the data retrieval to be requested. If it is decided to charge on a per use basis, the issue that may exist with this approach is that non BSC Parties may need to make a payment towards the operation of this service, if say for example a Licensed Exemptable Generator who is not a BSC Party, requests data that has been archived.

If it is decided to make a charge on a per use basis, the SSMG need to decide the level of this charge based on the costs from the Detailed Level Impact Assessment.

2.4 Requirement 3 - Additional Data Querying Facilities

2.4.1 Additional Tools

Additional P103 suggests that additional tools (created from say, Microsoft[®] Access[®]) should be provided to allow users to perform simple queries against the data held on the BMRS. Examples of the queries provided by the Proposer of P103 include the downloading of daily averages or totals, totals by company etc.

Given that the data published by the BMRA must be made available within the timescales provided within the Code, (for example the requirement to publish indicative data within 45 minutes of the end of a Settlement Period), it may be appropriate that the secondary data repository should be used that allows users to undertake such queries. The BSC Agent will be asked to specify the costs of adopting Requirement 3 both with and without a separate data repository.

2.4.2 Access to data over multiple BM Units or Settlement Days.

It is proposed that users of the BMRS are allowed to retrieve data for multiple BMUs and/or multiple Settlement Days. The Proposer of P103 has asserted that this feature would enable the following services to be provided:

- Providing BM Bid-offer stack and aggregated information on it;
- Providing BM acceptance stack and aggregated information on it;
- Providing aggregations by fuel type;
- Providing the gross volume of long and separately (short) energy imbalance volumes;
- Providing the gross volume of long and separately (short) information imbalance volumes.

The SSMG discussed whether any additional information was required in order to fulfil this obligation. The SSMG expressed concern about the degree to which BSC Parties might come to rely on any aggregated information in case there were ever any error in its calculation. The SSMG, whilst agreeing with the need for flexible querying of data across

multiple BM Units and Settlement Days, did not however consider it was appropriate to provide additional information such as fuel type on the BMRS. The SSMG were of the opinion that most companies would already know the fuel type of any BM Units they were interested in and therefore undertake queries based on the BM Units in a particular area of interest.

2.4.3 Requirements to Change the Code

Whilst the provision of additional data items may require a modification to the Code, it is unclear whether a Code change would be required to deliver a new software product such as that suggested within P103. A change to the Code could be necessary to ensure a cost recovery mechanism that spreads the costs across many BSC Parties if this were desirable. The SSMG expressed concern that the role of BSCCo should be extended to procure additional software on behalf of BSC Parties.

2.5 Requirement 4 - Additional Data Requirements

The proposal specifically identifies the following additional data items that are required to be displayed on the BMRS

- Half Hourly Transmission Loss Multiplier Data;
- Half Hourly metered quantities by BM Unit;
- Net imbalance position by Party account; and
- Net system imbalance before NGC's non balancing actions.

All of the above data items (except the final one) are currently provided within the System Operator variant of the Settlement Report which affords the opportunity for P103 to utilise this data delivery mechanism. P103 however, also requests further information to be provided which are not provided as specified within the System Operator variant of the Settlement Report. Specifically:

- Half Hourly Residual Cashflow value in £/MWh;
- Providing identifiers to accepted BM Trades that are arbitrage trades;
- Identifiers for each bid, offer and acceptances which have been tagged as included in or excluded from the Energy Imbalance Price calculations.

With respect to the "Half Hourly Residual Cashflow value in £/MWh" it is assumed that this is the "Residual Cashflow Reallocation Charge" calculated on a £/MWh basis. It is anticipated that this can be calculated by the BMRA carrying out processing on the data contained within the System Operator variant of the Settlement Report.

With respect to the tagging requirements, and in order to avoid further processing by the BMRA, it is assumed that this additional data will be made available from the SAA following each Settlement Run. It was suggested by the SSMG that this should be implemented by the introduction of relevant changes to the Settlement Report.

The tagging of arbitrage trades and bid, offer and acceptances could theoretically be produced by the BMRA during the calculation of Indicative Data, shortly after the completion of the Settlement Period. This would however force the BMRA to increase its processing capacity and possibly affect the ability to publish data in a timely manner for the

recent Settlement Periods. A solution to this would be for the SAA to produce the tagging information when the Energy Imbalance Prices are calculated in accordance with the Settlement Runs. This data could then be passed to the BMRA prior to its publication on the BMRS.

2.6 Other Potential Issues

This section of the document identifies other issues that have been identified during the production of this document.

2.6.1 Cost Recovery

It could be argued that P103 better facilitates the achievement of the Applicable BSC Objectives and therefore all Parties may be expected to benefit from this Modification Proposal. This view is aligned with that of the Proposer of P103.

A counter argument could be made that P103 will not benefit a certain portion of the market. This modification may therefore not be appropriate for those Parties who have already invested in systems and processes for the storage and reporting of information published by the BMRA. It could therefore be argued that only those Parties that would benefit from the publication of the data should pay for the changes introduced by the Modification Proposal.

Consultation respondents are asked to provide a view on the appropriateness of the cost recovery mechanism proposed.

3 OTHER CHANGES REQUIRED

This section defines amendments to industry systems, processes and documentation not already identified in the previous sections.

3.1 Tibco Messaging

The SSMG discussed whether it would be appropriate to rebroadcast any new data that is updated in line with Settlement Runs, where that data is not currently being broadcast. The SSMG concluded that no additional requirements to broadcast data via the TIBCO interface were required.

3.2 Potential Changes to External Systems

All Parties, the Transmission Company and ELEXON (as they also receive the Transmission Company variant of the Settlement Report) are impacted by the amendments to the Settlement Report. In the event that the Settlement Report (System Operator variant) would need to change, as set out in section 2 and therefore there would be an impact on all Parties

3.3 Potential Changes to Industry Documentation

The following lists the documentation that requires amendment as a result of the implementation of the Modification with a brief summary of the potential change. The documentation listed is believed to represent the full set of impacted documents at this time.

3.3.1 The Code

Depending on the solution chosen for each requirement, changes will be required to Section V of the Code to enable the reporting of data at each Settlement Run along with identifying the list of data items that will need to be updated in line with the Settlement Timetable.

3.3.2 Code Subsidiary Documents – Reporting Catalogue

It is likely that the amendments listed in section 2 will affect the contents of the Reporting Catalogue and Interface Definition Document (IDD).

3.3.3 Code Subsidiary Documents - Balancing and Settlement Code Procedures

It is possible that a new BSCP will be required to allow Parties to apply to ELEXON for data to be retrieved once it has been archived.

3.3.4 Service Description for the Balancing Mechanism Reporting Agent and Settlement Administration Agent

It is anticipated that changes will be required to the Service Description for the BMRA to enable the new data to be displayed and retained for a longer period than is currently.

3.3.5 Service Description for the Settlement Administration Agent

Changes to the SAA Service Description would be required. Specifically changes to identify the tagged data will be required. Changes will also be required to allow the sending of the Settlement Report to the BMRA along with additional data items that may be required.

3.3.6 NETA Data File Catalogue

The NETA Data File Catalogue requires amendment to include the new and amended reports, as defined in Section 2 of this document.

3.3.7 User Requirements Specification

Changes will be required to the URSs for the BMRA and the SAA in order that the data items within the new obligations can be fully documented.

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ANNEX 1 - CONTENTS OF SYSTEM OPERATOR VARIANT OF THE SETTLEMENT REPORT

The high level structure of the System Operator variant of Settlement Report is shown in figure A1 below. This shows the current version of the Settlement Report and does not take into account the effect of any Modification Proposals (for example P78) that due to be implemented. For a definitive list of data items included within this report, the reader should refer to the Interface Definition Document available from the BSC Website.

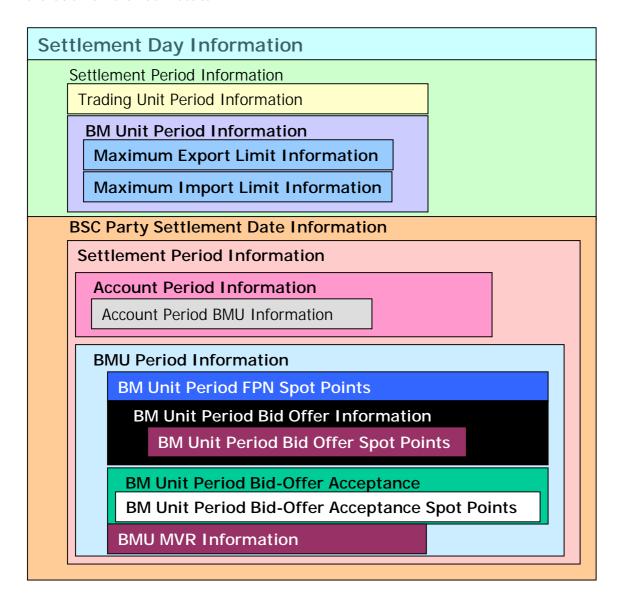


Figure A1 – High Level Structure of System Operator variant of Settlement Report

ANNEX 2 - CURRENT BMRA REPORTING OBLIGATIONS

The data items the BMRA is obliged to publish are contained within Table 1 of Annex V1 of the Code. The table, as contained in Version 8.0 of Section V (Effective Date: 30 September 2002) is shown below:

DATA AND RELEVANT SETTLEMENT PERIODS	FREQUENCY	FORMAT	DEFAULT
2-14 day ahead National Demand forecast (NDFD) – daily peak half hour value	Daily	Tabular	Previous forecast
2-52 week ahead National Demand forecast (NDFW) – weekly peak half hour value	Weekly	Tabular	Previous forecast
Day ahead National Demand forecast – value for each half hour	Daily	Tabular and graphic for D-1, D to D+1. Otherwise tabular	Previous forecast
Day ahead National Indicated Generation (INDGEM) and Demand (INDDEM) forecast – value for each half hour	Daily	Tabular and graphic for D-1, D to D+1. Otherwise tabular	Previous forecast
Updates of day ahead Indicated Imbalance (IMBALNGC), INDGEM, INDDEM and NGC Demand forecast (DF) – values for each half hour or each remaining half hour in day D	5 times each day	Tabular and graphic for D-1, D to D+1. Otherwise tabular	Previous forecast
2-14 day ahead Surplus forecast (SPLD) – daily peak half hour value	Each Business Day	Tabular	Previous forecast
2-52 week ahead Surplus forecast (SPLW) – weekly peak half hour value	Weekly	Tabular	Previous forecast
Day ahead Indicated Margin (MELNGC) - values for each half hour	Daily	Tabular and graphic for D-1, D to D+1. Otherwise tabular	None
Update of MELNGC – values for each half hour or each remaining half hour in day D	5 times each day	Tabular and graphic for D-1, D to D+1. Otherwise tabular	Previous forecast
System warnings (SYS_WARN)	When received	Text message only	None
Balancing Services Adjustment Data (BSAD)	Daily	Tabular	None
Initial National Demand Out-turn (INDO)	Half hourly	Tabular and graphic for D-1 and D. Otherwise tabular	None
Indicative System Buy Price (ISBP _j) – value for each SP	Half hourly	Tabular and graphic for D-1 and D. Otherwise tabular	None
Indicative System Sell Price (ISSP _j) – value for each SP	Half hourly	Tabular and graphic for D-1 and D. Otherwise tabular	None
Indicative Period BM Unit Total Accepted Bid and Offer Volumes (IQAB ⁿ _{ij} and IQAO ⁿ _{ij}) – value for each SP	Half hourly	Tabular and graphic for D-1 and D. Otherwise tabular	None
Indicative Period Balancing Mechanism Bid and Offer Cashflows (ICB ⁿ _{ij} and ICO ⁿ _{ij}) – value for each SP	Half hourly	Tabular and graphic for D-1 and D. Otherwise tabular	None

DATA AND RELEVANT SETTLEMENT PERIODS	FREQUENCY	FORMAT	DEFAULT
Final Physical Notification Data per BM Unit Quiescent Physical Notification Data	As received	Tabular and graphic for D-1 and D. Otherwise tabular	None
Bid-Offers Pairs per BM Unit (prices and MW volumes)	As received	Tabular and graphic for D-1 and D. Otherwise tabular	None
Changes to Dynamic Data Set and Maximum Export Limit/Maximum Import Limit items per BM Unit (MEL, MIL, RURE, RURI, RDRE, RDRI, NDZ, NTO, NTB, MZT, MNZT, SEL, SIL, MDV, MDP) per BM Unit	As received	Tabular and graphic for D-1 and D. Otherwise tabular.	Previously submitted Dynamic Data Set
Acceptance Data per BM Unit	As received	Tabular and graphic for D-1 and D. Otherwise tabular	None
Zonal day ahead Demand forecast – values for each half hour in each BMRS Zone	Daily	Tabular and graphic	None
Zonal day ahead Indicated Generation and Indicated Demand forecast – values for each half hour in each BMRS Zone	Daily	Tabular and graphic	None
Zonal update of Indicated Demand, Indicated Generation and Indicated Imbalance - values for each BMRS Zone and each half hour or each remaining half hour in day D	5 times each day	Tabular and graphic	Previous forecast