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| <p align="center"><b>Change Proposal – F40/02 (Page 1 of 2)</b></p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | <p><b>CP No: 639</b><br/>(mandatory by BSCCo)</p> |
| <p><b>Title</b> <i>(mandatory by originator)</i><br/>Handling of Missing or Invalid Data (SAA)</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                                   |
| <p><b>Description of Change</b> <i>(mandatory by originator)</i></p> <p>The SAA system functionality and the SAA specification documentation do not accord with the requirements of BSCP 01 'Overview of Trading Arrangements' and the Balancing and Settlement Code (v1.1 Section T) with respect to the handling of missing or invalid data.</p> <p>Currently a workaround (W022) is in place for the identification and handling of such invalid / missing data. This change proposes to replace the workaround (W022) with an enduring solution. It also addresses NETA CR397 and NETA Issues 143, 155 and 156.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                                                   |
| <p><b>Proposed Solution(s)</b> <i>(mandatory by originator)</i></p> <p>Where data is identified as missing or invalid prior to a Settlement Run, then:</p> <ul style="list-style-type: none"> <li>SAA will ensure that there is a check prior to each run of the system to determine whether any inbound data is missing or invalid. The attachment to this change proposal details the checks required for each of the inbound data flows to SAA, and indicates what the procedure is that should be followed in the event of missing / invalid data.</li> <li>If data is missing or invalid, and SAA are unable to obtain correct data prior to the scheduled run time in accordance with the requirements of the BSC and associated BSCPs, then the ELEXON Helpdesk should be informed (indicating that the call relates to missing SAA data, and that the priority is high).</li> </ul> <p>SAA will act in accordance with the BSC under instruction from BSCCo.</p> <p>In addition BSCP 01 'Overview of Trading Arrangements' requires amendment. Currently the BSCP references 'significant' and 'insignificant' when referencing missing or invalid data, however, the process to be followed by SAA, under the provisions of BSC Section T 1.4, is the same regardless of the significance of the missing or invalid data. The proposed change to BSCP 01 is defined in the attachment to this CP.</p> <p>It should be noted that this amendment to the BSCP is a change to the way in which the information is presented not a change to the obligations on BSC Parties.</p> |                                                   |
| <p><b>Justification for Change</b> <i>(mandatory by originator)</i></p> <p>Clause T1.4 of the BSC and the associated procedure BSCP 01 'Overview of Trading Arrangements' describes the relevant process for dealing with missing input data to the SAA system:</p> <ul style="list-style-type: none"> <li>If data is missing or invalid at the point of the scheduled SAA run (i.e. all efforts to obtain the missing / corrected data with the originator have failed), SAA should inform BSCCo.</li> <li>BSCCo will then instruct SAA, in accordance with the BSC, either to delay the run or to substitute appropriate default data.</li> </ul> <p>In order to support this process, SAA need to have procedures in place for:</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                   |

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| <p align="center"><b>Change Proposal – F40/01 (Page 2 of 2)</b></p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | <p><b>CP No: 639</b><br/><i>(mandatory by BSCCo)</i></p> |
| <ol style="list-style-type: none"> <li>1. Checking prior to each SAA run whether the inbound data is “missing or invalid”.</li> <li>2. Informing BSCCo where this is the case.</li> <li>3. Delaying the run, or entering substitute data, as specified by BSCCo.</li> </ol> <p>Currently the OSM and the SAA system do not fully support this process, which necessitated the implementation of a workaround (W022), and this change proposal is intended to provide the enduring solution to replace the workaround.</p> <p>With regards to BSCP 01 ‘Overview of Trading Arrangements’, currently the BSCP references ‘significant’ and ‘insignificant’ when referencing missing or invalid data, however, the process to be followed by SAA, under the provisions of BSC Section T 1.4, is the same regardless of the significance of the missing or invalid data. Therefore Appendix 5 requires amendment to ensure that the processing of missing or invalid data is clarified. It should be noted that this is not a change to functionality being introduced in the BSCP, but a change to the representation of the information defined therein.</p> |                                                          |
| <p><b>Other Configurable Items Potentially Affected by Proposed Solution(s) <i>(optional by BSCCo)</i></b></p> <p>SAA Service Description (and SAA Specification documentation)<br/>BSCP01 V2.0</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                                                          |
| <p><b>Impact on Core Industry Documents <i>(optional by originator)</i></b></p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                                                          |
| <p><b>Related Changes and/or Projects <i>(mandatory by BSCCo)</i></b></p> <p>None</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                                                          |
| <p><b>Originator’s Details:</b></p> <p><b>BCA Name</b>.....</p> <p><b>Organisation</b>.....</p> <p><b>Email Address</b>.....</p> <p><b>Date</b>.....</p> <p><b>[BSC Panel Representative]</b>.....</p> <p><b>Organisation</b>.....</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                                                          |

Attachments: Y/ (If Yes, No. of Pages attached: **6**.....)  
(delete as appropriate)

### **Attachment to CP 639 – Procedure(s) Required for Each Input Flow**

The following tables lists the following for each of the inbound data flows to SAA:

- The checks required to ensure that SAA detects missing or invalid data relevant to the Settlement Run.
- The procedure to be followed on determination of missing / invalid data by SAA.

It should be noted that it is expected that SAA determine the most appropriate mechanism for the loading of any default data / data files into the SAA System, and consequently, there is no comment on the nature of data loading in this change proposal.

It should also be noted that this section pertains to data validation on receipt and file loading, not to data defaulting undertaken by SAA as part of Settlement Calculations.

#### **1. Checks at Interim Information Run:**

The Balancing and Settlement Code Section T 1.4.2 states:

“ ... If by the time SAA is to carry out the Interim Information Run complete and valid data have not been received by the SAA in accordance with 1.3. in respect of the relevant Settlement Day, then:

(a) where the invalid or missing data are not, in SAA's opinion, a significant proportion of the data required to carry out the Interim Information Settlement Run in respect of that Settlement Day, the SAA shall inform BSCCo and shall input default data (in accordance with BSCP 01) for the purposes of producing the Interim Information Settlement Run.

(b) Where the invalid or missing data are, in the SAA's opinion, a significant proportion of the data required to carry out the Interim Information Settlement Run in respect of that Settlement Day:

(i) if the SAA considers that the invalid data will be corrected and resubmitted or the missing data will be submitted or the missing data will be submitted by the end of the next following Business Day, the SAA shall inform BSCCo and shall delay the Interim Information Settlement Run until such data is corrected and re-submitted or submitted (as the case may be);

(ii) if:

(1) the SAA does not consider that the invalid data will be corrected and re-submitted or the missing data will be submitted by the end of the next following Business Day; or

(2) in the case of paragraph (i) above, the SAA does not receive such data by the end of the next following Business Day,

the SAA shall inform BSCCo and BSCCo shall determine whether default data should be substituted for the invalid or missing data (in accordance with BSCP 01) for the purposes of producing the Interim Information Settlement Run or whether production of the Interim Information Settlement Run should be delayed for a specified period in order that complete and valid data may be obtained by the SAA;

(c) the SAA shall continue to request the person responsible for submitting such data to resubmit and / or correct the data.”

Therefore it is expected that SAA identify missing / invalid data in accordance with the timescales identified in BSCP 01 and BSCP 04 (specifically defining the process for receipt of Interconnector

User BM Unit Metered Volumes) in conjunction with the SAA Settlement Calendar, for receipt of data.

For all circumstances where missing / invalid data is identified by SAA, SAA will contact BSCCo and notify them of the details of the missing / invalid data and will take instruction from BSCCo as to whether default data is required and to the nature of such default data, regardless of whether the missing / invalid data is deemed, in SAA's opinion, to be a significant proportion or not, of the data required, as the procedure under the provisions of the Balancing and Settlement Code for both circumstances involves notifying BSCCo and receiving instruction from BSCCo.

| <b>Inbound Data Flow</b>                                                     | <b>Detecting Missing or Invalid Data</b>                                                                                                   | <b>Action</b>                                                                                                                                                                                                                                                                                                                              |
|------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Final Physical Notification (FPN) Data                                       | Check that FPN data has been provided for all BM Units with the FPN Flag set, or Bid Offer data provided.                                  | Where this is not the case, SAA will notify BSCCo and where required, default data will be agreed and loaded into SAA.<br>Note that workaround W018 (and any enduring solution) allows NGC to provide manual corrections and additions to BM data. In most cases this workaround would be used as the means of providing missing FPN data. |
| Balancing Services Adjustment Data                                           | Check that data has been explicitly provided and successfully loaded, prior to initiating run.                                             | Where this is not the case, SAA will notify BSCCo and default data will be agreed and loaded into SAA. (N.B. The system contains functionality to default to the last Settlement Period for which data was submitted. The intention of this check is to give BSCCo the opportunity to override this system default.)                       |
| Bid - Offer Data                                                             | Check that Bid / Offer data has been provided for any BM Unit with a Bid Offer Acceptance.                                                 | Where this is not the case, SAA will notify BSCCo and default data will be agreed and loaded into SAA. Note that workaround W018 (and any enduring solution) allows NGC to provide manual corrections and additions to BM data. In most cases this workaround would be used as the means of providing missing Bid - Offer data.            |
| Bid - Offer Acceptances                                                      | Check the File Sequence Numbers for potential out-of-sequence files, indicating missing Acceptance data.                                   | Where this is not the case, SAA will notify BSCCo and default data will be agreed and loaded into SAA. Note that workaround W018 (and any enduring solution) allows NGC to provide manual corrections and additions to BM data. In most cases this workaround would be used as the means of providing missing Bid - Offer Acceptance data. |
| Interconnector User BM Unit Metered Volumes                                  | Check that data has been received for each Interconnector <sup>1</sup> .                                                                   | Where this is not the case, SAA will notify BSCCo and default data will be agreed and loaded into SAA.                                                                                                                                                                                                                                     |
| Account Bilateral Contract Volumes, Metered Volume Reallocation Data         | Check that data has been received from ECVA system                                                                                         | Where this is not the case, SAA will notify BSCCo and default data will be agreed and loaded into SAA.                                                                                                                                                                                                                                     |
| CVA BM Unit Metered Volumes, GSP Group Takes, Interconnector Metered Volumes | Check that CDCA run has taken place. (CDCA and SAA share a common database, the results of the CDCA run will automatically be available to | Where this is not the case, SAA will notify BSCCo and default data will be agreed and loaded into SAA.                                                                                                                                                                                                                                     |

<sup>1</sup> BSCP 04 specifies a process for ensuring that these files are received. It would only be if this process had failed that data would still be missing at the point of the settlement run.

| Inbound Data Flow | Detecting Missing or Invalid Data                 | Action                                                                                            |
|-------------------|---------------------------------------------------|---------------------------------------------------------------------------------------------------|
|                   | SAA, provided the aggregation run took place.)    |                                                                                                   |
| SVA Metered Data  | Check that no files from SVAA have been received. | Where this is not the case, SAA will confirm with SVAA, disregard the data file and notify BSCCo. |

## 2. Initial Settlement Run Checks

For the Initial Settlement Run, and in accordance with the Balancing and Settlement Code Section T 1.4.5:

“If at any time from the business day prior to the day on which the SAA is to carry out the Initial Interim run the SAA forms the view that it does not expect to receive substantially complete and valid data ... in respect of the settlement day in time to carry out such settlement run, then

(a) SAA shall inform BSCCo, and

(b) BSCCo shall determine whether default data shall be substituted for the missing or invalid data (in accordance with BSCP 01) for the purposes of producing the Initial Settlement Run or whether production of the Initial Settlement Run should be delayed for a specified period in order that complete and valid data may be obtained by the SAA.”

Therefore the following checks will be undertaken:

| Inbound Data Flow                      | Detecting Missing or Invalid Data                                                                         | Action                                                                                                                                                                                                                                                                                                                                     |
|----------------------------------------|-----------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Final Physical Notification (FPN) Data | Check that FPN data has been provided for all BM Units with the FPN Flag set, or Bid Offer data provided. | Where this is not the case, SAA will notify BSCCo and where required, default data will be agreed and loaded into SAA.<br>Note that workaround W018 (and any enduring solution) allows NGC to provide manual corrections and additions to BM data. In most cases this workaround would be used as the means of providing missing FPN data. |
| Balancing Services Adjustment Data     | Check that data has been explicitly provided and successfully loaded, prior to initiating run.            | Where this is not the case, SAA will notify BSCCo and default data will be agreed and loaded into SAA. (N.B. The system contains functionality to default to the last Settlement Period for which data was submitted. The intention of this check is to give BSCCo the opportunity to override this system default.)                       |
| Bid - Offer Data                       | Check that Bid / Offer data has been provided for any BM Unit with a Bid Offer Acceptance.                | Where this is not the case, SAA will notify BSCCo and default data will be agreed and loaded into SAA. Note that workaround W018 (and any enduring solution) allows NGC to provide manual corrections and additions to BM data. In most cases this workaround would be used as the means of providing missing Bid - Offer data.            |
| Bid - Offer Acceptances                | Check the File Sequence Numbers for potential out-of-sequence files, indicating missing Acceptance data.  | Where this is not the case, SAA will notify BSCCo and default data will be agreed and loaded into SAA. Note that workaround W018 (and any enduring solution) allows NGC to provide manual corrections and additions to BM data. In most cases this workaround would be used as the means of providing missing Bid - Offer Acceptance data. |

| <b>Inbound Data Flow</b>                                                     | <b>Detecting Missing or Invalid Data</b>                                                                                                                                                      | <b>Action</b>                                                                                                                                                                                                                                                                     |
|------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Interconnector User BM Unit Metered Volumes                                  | Check that data has been received for each Interconnector <sup>2</sup> .                                                                                                                      | Where this is not the case, SAA will notify BSCCo and default data will be agreed and loaded into SAA.                                                                                                                                                                            |
| Account Bilateral Contract Volumes, Metered Volume Reallocation Data         | Check that data has been received from ECVAA system                                                                                                                                           | Where this is not the case, SAA will notify BSCCo and default data will be agreed and loaded into SAA.                                                                                                                                                                            |
| CVA BM Unit Metered Volumes, GSP Group Takes, Interconnector Metered Volumes | Check that CDCA run has taken place.<br>(CDCA and SAA share a common database, the results of the CDCA run will automatically be available to SAA, provided the aggregation run took place.)  | Where this is not the case, SAA will notify BSCCo and default data will be agreed and loaded into SAA.                                                                                                                                                                            |
| SVA Metered Data                                                             | Check that the data in respect of Supplier Volume Allocation has been received.                                                                                                               | Where this is not the case, SAA will notify BSCCo and default data will be agreed and loaded into SAA.                                                                                                                                                                            |
| SVA Metered Data                                                             | Check that the GSP Group Take for each GSP Group from CDCA matches the associated Aggregated Supplier Volume Allocation (accounting for tolerances).                                          | In the first instance SAA will check such discrepancies manually with SVAA.<br>If this cannot be resolved, then SAA will notify BSCCo and BSCCo will determine appropriate action.                                                                                                |
| SVA Metered Data                                                             | Check that the CDCA Run Number received from CDCA matches the CDCA Run Number received from SVAA.                                                                                             | In the first instance SAA will check any discrepancies with SVAA (and CDCA).<br>If this cannot be resolved, then SAA will notify BSCCo and BSCCo will determine appropriate action.                                                                                               |
| SVA Metered Data                                                             | A BM Unit Identifier in the Supplier Volume Allocation is found, by SAA, to be invalid.                                                                                                       | SAA, by default, adds the metered volume for the invalid BM Unit into the Base BM Unit for the Supplier in the relevant GSP Group.<br>SAA should notify BSCCo that it has undertaken this defaulting in time for BSCCo to instruct SAA otherwise, if deemed appropriate by BSCCo. |
| SVA Metered Data                                                             | A BM Unit Identifier in the Supplier Volume Allocation is found, by SAA, to be missing (on the basis that there are no associated SVA Metering Systems and no data is submitted as a result). | SAA, by default, provides a zero metered volume for the missing BM Unit for the Supplier in the relevant GSP Group.<br>SAA should notify BSCCo that it has undertaken this defaulting in time for BSCCo to instruct SAA otherwise, if deemed appropriate by BSCCo.                |

<sup>2</sup> BSCP 04 specifies a process for ensuring that these files are received. It would only be if this process had failed that data would still be missing at the point of the settlement run.

## CP 639: Changes to V2.0 of BSCP 01 ‘Overview of Trading Arrangements’

The following details the requisite changes to BSCP 01 in order to support the preceding definition of the identification and processing of missing / invalid data.

It should be noted that the changes detailed are believed to represent a change to the manner in which this information is presented, rather than a change to the process defined.

The following represents an amended Section 5, changes to text are highlighted in italics and underlined.

V2.0 of BSCP 01 ‘Overview of Trading Arrangements’:

### “5 Appendices

#### 5.1 Interim Information Run

Actions following the detection of invalid data inbound to the SAA (or missing data) for the purpose of carrying out the Interim Information Run are defined in the following table.

| Data Inbound to SAA                                                                           | Sender    | Action if invalid or missing inbound data                             |
|-----------------------------------------------------------------------------------------------|-----------|-----------------------------------------------------------------------|
| Final Physical Notification Data                                                              | BMRA / TC | <u>Inform BSCCo and proceed in accordance with BSCCo instruction.</u> |
| Balancing Services Adjustment Data                                                            | BMRA / TC | <u>Inform BSCCo and proceed in accordance with BSCCo instruction.</u> |
| Bid Offer Data                                                                                | BMRA / TC | <u>Inform BSCCo and proceed in accordance with BSCCo instruction.</u> |
| Acceptance Data                                                                               | BMRA / TC | <u>Inform BSCCo and proceed in accordance with BSCCo instruction.</u> |
| BM Unit Metered Volumes for Interconnector BM Units                                           | IA        | Inform BSCCo and proceed in accordance with BSCCo instruction.        |
| Metered Volume Reallocations by BM Unit                                                       | ECVAA     | <u>Inform BSCCo and proceed in accordance with BSCCo instruction.</u> |
| Account Bilateral Contract Volumes                                                            | ECVAA     | <u>Inform BSCCo and proceed in accordance with BSCCo instruction.</u> |
| BM Unit Metered Volumes for BM Units other than Supplier BM Units and Interconnector BM Units | CDCA      | <u>Inform BSCCo and proceed in accordance with BSCCo instruction.</u> |
| GSP Group Take for each GSP Group                                                             | CDCA      | <u>Inform BSCCo and proceed in accordance with BSCCo instruction.</u> |
| Interconnector Metered Volumes                                                                | CDCA      | <u>Inform BSCCo and proceed in accordance with BSCCo instruction.</u> |

In the event that the SAA receives invalid or missing data and is required to consult with BSCCo, the decision on whether and what default data should be substituted shall be at the absolute discretion of BSCCo.

#### 5.2 Initial Settlement Run

If the SAA does not expect to receive substantially complete and valid data in respect of the relevant Settlement Day in time to carry out the relevant Settlement Run for the following data items:

- Final Physical Notification Data
- Balancing Services Adjustment Data
- Bid Offer Data
- Acceptance Data
- BM Unit Metered Volumes for all BM Units (including Interconnector User and Supplier BM Units)
- Interconnector Metered Volumes
- GSP Group Take for each GSP Group
- Metered Volume Reallocations
- Account Bilateral Contract Volumes

The SAA shall consult BSCCo and proceed in accordance with the BSC under BSCCo instruction. The decision by BSCCo on whether and what default data should be substituted shall be at the absolute discretion of BSCCo.”