

Nordic Imbalance Settlement

Operational Test Run guide and test cases 4.4.2016 – 26.6.2016

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2 Introduction

This document is an appendix to overall commissioning plan available <u>www.esett.com/commissioning</u>. This document further elaborates test cases carried out during Operational Test Run phase.

Operational Test Run in a nutshell is described in the table below. For a complete description of each individual phase, please see chapter 8 in the Commissioning plan.

Sequence	Time period	Available services
Connectivity testing	Weeks 14-17 (2016-04-04 → 2016-04-29)	* Online Service (read mode only) * Messaging Service
Structure data verification	Weeks 18-19 (2016-05-02 →2016-05-15)	* Online Service
Maintenance break	Week 20 (2016-05-16 → 2016-05-22)	n.a.
Shadow settlement – report data (based on week 18 structures)	Weeks 21-23 (2016-05-23 → 2016-06-12)	* Online Service * Messaging Service
Shadow settlement – analyze settlement result	Weeks 21-23 (2016-05-23 → 2016-06-12)	* Online Service * Messaging Service
Free testing & testing via test cases	Weeks 24-25 (2016-06-13 → 2016-06-26)	* Online Service * Messaging Service * Information Service

3 Environment and addresses

Instructions and support on how to access and utilize eSett's communication services (Messaging Service and Information Service) can be found from Communication Guidelines (<u>www.esett.com/materials</u>) and Online Service User Guide (accessible via Online Service).

Operational Test Run testing is carried out with the production environment of the eSett Settlement system (a separate environment and addresses in comparison to the one utilised for System vendor testing). Detailed addresses shall be provided by eSett to the market participants **by 23rd of March**.



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4 OTR Connectivity testing test cases

4.1 Important notices and limitations

- · Market participant shall notify eSett via eSett ticketing system when testing activities start
- Market participant shall send a ticket via eSett web page after successfully connectivity with services
- Information Service is not available during Connectivity testing phase
- Online Service shall be in "read-only" mode during Connectivity testing phase (i.e. restrictions to features for updating information and entering data)
- Online Service supports only English language during Operational Test Run
- Hourly gate closures, as defined in the NBS handbook are not applied during Connectivity testing phase
- Following data flows (for messaging) are assumed to be used during Connectivity testing phase for sending message by market participant to eSett
 - BRP: Bilateral Trade
 - TSO: Prices, Bilateral Trade, Consumption or Production (any business type)
 - DSO: Consumption or Production (any business type)
 - NPS: PX Market Flow
 - Please note that these are recommendations, and market participant may select a data flow that is considered appropriate
- Following data flows (for messaging) are used during Connectivity testing phase for receiving a message from eSett to market participant(s)
 - BRP: Settlement Results
 - TSO: Settlement Results
 - DSO: MGA Imbalance
 - NPS: Settlement Results
- Following data flows (for messaging) are not supported during Connectivity testing phase:
 - Supportive Power
 - MBA-MGA Relations
 - MGA-MGA Oriented Border
 - Area Master Data
 - Intermediate Confirmation Reports for MGA Exchanges and Bilateral Trades
- Following Online Service features are not available:
 - Collateral management
 - Reporting



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- Data packages subscription

4.2 Objectives for connectivity testing

Connectivity testing, as described in section 8.1 of the Commissioning plan, has three key objectives for each market participant to ensure proper connectivity between environments has been achieved:

- Market participant can successfully log in to the Online Service
- Market participant successfully submits a single message to eSett and receives related acknowledgement message from eSett
- Market participant successfully receives a single message from eSett and submits related acknowledgement message to eSett

4.2.1 Online Service test case

Summary

Market participant visit Online Service web site and is able to log in to the service with two-factor authentication enabled.

Expected results

- 1. Market participant is able to connect to Online Service
- 2. Market participant is able to log in to Online Service with two-factor authentication
- 3. Market participant can navigate and open available menus in Online Service

Test steps

- 1. Navigate to online.esett.com
- 2. Log in with two-factor authentication

4.3 Messaging Service test cases

Messaging related testing shall be performed until a successful message transfer and acknowledgement processing has been performed (expected results of test cases below have been met).

It is encouraged that market participant start submitting messages to eSett at as early as possible stage.

For messaging from eSett to market participant, eSett shall perform outbound messaging daily at 12.00 EET (11.00 CET) during the Connectivity testing period, until a successful connectivity has been established.

4.3.1 Market participants to eSett

Summary

Market participant submits one message (type based on market role and selected data flows) containing time series data to Messaging Service and receives acknowledgment in return. Following aspects need to be considered prior submission:

- 1. Select a message type, see section <u>Important notices and limitations</u> for a recommendation of appropriate message type
- Reported messages shall include by minimum a single time series with values for a single calendar day (24 hours) and so that the time series consists data for whole day 4th of April 2016.



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Expected results

- 1. Messaging Service receives and accepts message
- 2. Messaging Service submits an acknowledgement message to market participant (positive or negative)

Test steps

- 1. Market participant creates a message which includes data for whole day 4th of April 2016
- 2. Market participant submits a selected message to eSett's Messaging Service
- 3. Messaging Service receives and message is processed correctly
- 4. Messaging Service sends ACK message to Market participant

4.3.2 eSett to Market participants

Summary

eSett submits one message (type based on market role and selected data flows) containing time series data to market participant and receives an acknowledgment in return. Sent message will be role-based (see section 3.1 for details), include a single time series which consists of values for a single calendar day (24 hours) 5th of April.

Note that message content does not correspond to the submitted data and is used only for connectivity purposes (i.e. no calculation are performed).

Expected results

- 1. Market participant receives and accepts submitted message by eSett
- 2. Market participant submits an acknowledgement message to eSett (positive or negative)

Test steps

- 1. eSett submits a message to market participant via Messaging Service
- 2. Market participant receives and processes it correctly
- 3. Market participant submits an acknowledgement message to eSett via Messaging Service

5 Structure data verification

This chapter describes the activities that market participants should carry out during Structure data verification phase. This phase is intended to verify and correct possible mistakes in imported structures.

Market Participants acting in BRP, DSO or TSO roles shall check all structures in all their roles. Instructions how to use Online Service are available in separate document "Online Servicer User Guide" available at https://online.esett.com

5.1 Important notices and limitations

- Market participant shall notify eSett via eSett ticketing system when testing activities start
- Market participant shall send a ticket via eSett web page after successfully connectivity with services
- In case structure validity start time is in the past, please use March 1st 2016 00:00 as the validity start time



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- Submitting settlement data during Structure verification phase is not allowed
- Online Service is restricted to read-only mode, except structure management
- Information Service is not available
- No gate closures are applied, that allows even the structure changes into the past

5.2 Verify Balance Responsible Party structures

Summary

Market participant acting in Balance Responsible Party role verifies from Online Service that following information are correct and if not, fixes them:

- 1. Users add/correct in Online Service
- 2. Company and market party details details can be updated in Online Service, for other inquiries contact eSett
- 3. Regulation Object(s) contact eSett
- 4. Production Unit Regulation Object relation(s) correct in Online Service
- 5. Bilateral Trade market entity connection(s) correct in Online Service and in Sweden contact eSett
- 6. Consumption market entity connection(s) check RBR and contact the respective DSO to create it
- 7. Production market entity connection(s) check RBR, PU and contact the respective DSO to create it
- 8. PX Trading market entity connection(s) contact eSett
- 9. Retailer Balance Responsibility(ies) correct in Online Service or contact eSett
- 10. Service Providers & their access rights correct in Online Service

If there are errors with existing structures, market participant is obligated to update the structures they can edit so that it corresponds to the real market structures. If the responsibility for updating lies with another market participant, then contact the responsible party and ask them to correct the structure. Contact eSett for the update of structure that are not within the market participant's responsibility.

Expected results

Information available in Online Service is correct or is corrected to correspond with real market structures. Market participant notifies eSett via ticketing system when structures have been verified.

Test steps

- 1. If the structures listed above are correct, market participant does not take any actions.
- 2. If there are one or more errors, you can fix those you are allowed to update in Online Service. Remaining issues shall be forwarded to relevant market participant that is responsible for this update. Any other issues can be sent to eSett during weeks 18-19. Make sure that the validities begin earliest May 2nd 2016 00:00 for new structures and March 1st 2016 00:00 for existing structures with validities in the past.
- 3. Market participant to send eSett a ticket after structures have been reviewed

5.3 Verify Distribution System Operator structures

Summary

Market participant acting in Distribution System Operator role verifies from Online Service that following information are correct and if not, fixes them:

- 1. Production Unit(s) correct in Online Service
- 2. Retailers for Production Unit(s) correct through Online Service



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- 3. Consumption market entity connection(s) correct in Online Service
- 4. Metering Grid Area(s) contact TSO or eSett
- 5. Metering Grid Areas' imbalance responsible retailer(s) correct in Online Service
- 6. MGA Exchange market entity connection(s) contact eSett
- 7. Service Providers & their access rights correct in Online Service
- 8. Users correct through Online Service
- 9. Company and market party details details can be updated in Online Service, for other inquiries contact eSett

If there are errors with existing structures, market participant is obligated to update the structures they can edit so that it corresponds to the real market structures. If the responsibility for updating lies with another market participant, then contact the responsible party and ask them to correct the structure. Contact eSett for the update of structure that are not within the market participant's responsibility.

Expected results

Information available in Online Service is correct or is corrected to correspond with real market structures.

Test steps

- 1. If the structures listed above are correct, market participant does not take any actions.
- 2. If there are one or more errors, you can fix those you are allowed to update in Online Service. Remaining issues shall be forwarded to relevant market participant that is responsible for this update. Any other issues can be sent to eSett during weeks 18-19. Make sure that the validities begin earliest May 2nd 2016 00:00 for new structures and March 1st 2016 00:00 for existing structures with validities in the past.
- 3. Market participant to send eSett a ticket after structures have been reviewed

6 Shadow settlement test cases

Shadow settlement phase focuses on carrying out settlement calculation. Market participants are guided to send data according to production reporting procedures.

See the complete description of the objectives of the Shadow settlement in the Commissioning plan (section 8.4).

6.1 Important notices and limitations

- All reported data must include settlement data for week 18 Shadow settlement shall be performed only for data submitted for week 18
- Settlement structures must correspond the situation for week 18 and for any other periods data is being reported
- Invoices for BRPs will be generated for week 18 and are available for review in Online Service during the later weeks of Shadow Settlement phase. There will not be financial transactions and they are not to be paid.

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- Online Service is in read-only mode
 - Collaterals management including deposit banks is not available.
 - Data extraction is not accessible



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- Report subscription and publishing is not available.
- Service Provider time-dependant feature not available.
- Online Service is available only in English.
- Gate Closures for Structural Changes are applied as in go-live configuration
- Gate Closures for submitting hourly values are open only for week 18, other days cannot be reported. They will be opened in Free Testing phase.

6.2 Schedule



Figure 1 Shadow settlement overall schedule

Day(s)	Activities	Service availability
Monday – Wednesday	Market participants report the settlement data for week 18 to BASSE through Online Service and Messaging Service - Confirmation reports are sent - No intermediate or final settlement results are sent Review that settlement has been calculated on previous Thursday (starting from second week of Shadow settlement)	* Online Service (read & write) * Messaging Service (full) * Information Service (not available)
Thursday	eSett will calculate and report settlement results for week 18. Both Intermediate and Final Settlement Results are sent No activities are expected by market participants during Thursdays, settlement results shall be checked during Friday. Structure amendments for week 18 requested by market participants with impact to settlement must be delivered to eSett by Wednesday at latest and influences next week's settlement reporting and results.	* Online Service (read) * Messaging Service ("read") * Information Service (not available)
Friday	Market participants verify the updated structures and the week 18 settlement result using Online Service (Balance Report, Settlement Results)	* Online Service (read) * Messaging Service ("read") * Information Service (not available)



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Saturday – Sunday	No activities	* Online Service (read) * Messaging Service ("read") * Information Service (not availab	le)

6.3 Balance Responsible Party

6.3.1 Submit bilateral trade

Summary

Market participant acting in BRP role in Finland or Norway, and Svenska Kraftnät in Sweden, shall report Bilateral Trade(s) for week 18 by submitting valid message(s) via Messaging Service (FTP, Web Service, SMTP).

Balance Settlement System shall perform technical and business validations and report the result to the Market participant by generating and delivering Acknowledgement message. When receiving Acknowledgement message, the Market participant user shall logon to the Online Service where the previously submitted and validated data shall be available for review. The Market participant user shall review the data in Online Service and verify that it matches with the data submitted via Messaging Service.

Note: All Bilateral Trades are reported by TSO in Sweden (Svenska Kraftnät) This test case is not applicable to Swedish BRPs

Expected results

- 1. Acknowledgement content states fully accepted message (Reason Code: A01 OK)
- 2. Data is visible via Online Service matches with the data submitted via Messaging Service

Test steps

- 1. Submit Message via Messaging Service data flow interface
- 2. Receive positive acknowledgment from Messaging Service
- 3. Review it is shown correctly in Online Service

6.3.2 Receive bilateral trade confirmation report

Summary

Market Participant acting in BRP role or Svenska Kraftnät in Sweden, shall receive Bilateral Trade Confirmation Report via preferred channel. Those are sent after delivery of inbound message reporting the Bilateral Trade.

Expected results

Market participant receives valid message via their preferred communication channel and the content corresponds submitted data. Market participant sends an Acknowledgment message in response.

Test steps

- 1. Market participant's system receives the message
- 2. Market participant verifies that it contains valid data
- 3. Market participant's system sends an Acknowledgement message to Balance Settlement System



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4. Market participant verifies that the results corresponds the initially submitted data or counterparty's values

6.3.3 Receive final imbalance settlement result

Summary

Market participant acting in BRP role shall receive Settlement Results. Balance Settlement System shall send Settlement Results via preferred channel to the all BRPs with data relevant to them. These messages are sent on Thursdays at 13:00 CET / 14:00 EET.

Expected results

Market participant receives valid message via their preferred communication channel and the content corresponds submitted data. Market participant sends an Acknowledgment message in response.

Test steps

- 1. Market participant's system receives the message
- 2. Market participant verifies that it contains valid data
- 3. Market participant's system sends an Acknowledgement message to Balance Settlement System

6.3.4 Receive final MGA Imbalance per Retailer

Summary

Market participant acting in BRP role shall receive MGA Imbalance per Retailer. Balance Settlement System shall send final MGA Imbalance per Retailer via preferred channel to the all BRPs with data relevant to them. These messages are sent on Thursdays at 13:00 CET / 14:00 EET.

Expected results

Market participant receives valid message via their preferred communication channel and the content corresponds submitted data. Market participant sends an Acknowledgment message in response.

Test steps

- 1. Market participant's system receives the message
- 2. Market participant verifies that it contains valid data
- 3. Market participant's system sends an Acknowledgement message to Balance Settlement System

6.3.5 View Invoices

Summary

Market participant user is able to display respective invoices and download them in PDF and XML format from Online Service. Invoice status has to be one of the following statuses: Unpaid; Unpaid, Overdue; Partially paid; Partially paid, Overdue; Paid; Overpaid. Invoices are displayed in local currencies.

Expected results

Market participant user can view and download invoices related to his/hers company

Test steps

1. Logged as the user (BRP role), navigate to Invoices screen



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- 2. System displays all invoices of given BRP in selected period
- 3. Verify that invoices corresponds imbalance settlement results
- 4. User downloads the pdf invoice
- 5. Verify that the correct invoice was downloaded
- 6. User downloads the xml invoice
- 7. Verify that the correct invoice was downloaded

6.3.6 Export invoices list

Summary

Online Service BRP User is able to export list of respective invoices. Invoice status has to be one of the following statuses: Unpaid; Unpaid, Overdue; Partially paid; Partially paid, Overdue; Paid; Overpaid.

Expected results

Market participant user can export list of the invoices.

Test steps

- 1. Logged as the user (BRP role), navigate to Invoices screen
- 2. System displays all Invoices of given BRP in selected period
- 3. User sets different filters
- 4. User exports the list via Export to Excel
- 5. Verify that all data were exported to excel correctly according to selected filter
- 6. Note: Exported data contains one additional column Total Amount in EUR that is not displayed in Online Service.

6.3.7 View invoicing report

Summary

BRP is able to displays weekly/monthly Invoicing Report. Filtered week has to have all invoices approved. Filtered month has to have all weeks with approved invoices. Note that there is only one invoice in invoicing report.

Expected Results

Invoicing Report is displayed and the displayed data corresponds to the data in approved invoices.

Test steps

- 1. Navigate to Invoicing Report
- 2. Select Aggregation (week or month). Select Period and Country and confirm the filters.
- 3. Check that displayed data corresponds to the data in invoices.

6.3.8 Report hourly values manually via Online Service

Summary

Market participant acting in BRP role shall submit Bilateral Trade information via Online Service by typing the hourly values manually. If there are no existing values in the trade matched values will be the same as the typed.



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Note: All Bilateral Trades are reported by TSO in Sweden, this test case is not applicable to Swedish BRPs

Expected Results

Data can be submitted via Online Service by typing the hourly values manually.

Test steps

- 1. Navigate and log in to Online Service
- 2. Navigate to submit Bilateral Trade information
- 3. Type values
- 4. Save data

6.3.9 Report hourly values by uploading a file via Online Service

Summary

Market participant acting in BRP role shall submit Bilateral Trade information via Online Service by uploading the message containing hourly values

Note: All Bilateral Trades are reported by TSO in Sweden, this test case is not applicable to Swedish BRPs

Expected Results

Data can be submitted via Online Service by uploading the message file of the hourly values.

Test steps

- 1. Navigate and log in to Online Service
- Navigate to submit Bilateral Trade information
 Type values
- 4. Save data

6.3.10

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Summary

Market participant acting in BRP role is able to verify its consumption and production imbalance settlement results (volumes/amounts) from Online Service, including drilldowns.

Note: Additional help with navigating in Online Service can be found from Online Service User Guide documentation available at www.esett.com/materials

Expected Results

All calculations (including aggregations in different drilldown levels) are correct, data is correct and functionalities of Online Service work flawlessly.

Test steps

- 1. Navigate and log in to Online Service
- 2. Navigate to Consumption Imbalance and/or Production Imbalance view
- 3. Perform drilldowns to verify all aggregations and input data related imbalance settlement calculation
- 4. Navigate to Balance Report



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5. Perform all market entity connections related imbalance settlement calculation

6.4 Distribution System Operator

6.4.1 Submit MGA exchange

Summary

Market participant acting in DSO role shall report MGA Exchange by submitting valid message via Messaging Service (FTP, Web Service, SMTP).

Balance Settlement System shall perform technical and business validations and report the result to the Market participant by generating and delivering Acknowledgement message. When receiving Acknowledgement message, the Market participant user shall logon to the Online Service where the previously submitted and validated data shall be available for review. The Market participant user shall review the data in Online Service and verify that it matches with the data submitted via Messaging Service.

Expected results

- 1. Acknowledgement content states fully accepted message (Reason Code: A01 OK)
- 2. Data visible via Online Service matches with the data submitted via Messaging Service

Test steps

- 1. Submit Message via Messaging Service data flow interface
- 2. Receive positive acknowledgment from Messaging Service
- 3. Review it is shown correctly in Online Service

6.4.2 Submit hourly metered production per production unit

Summary

Market participant acting in DSO role shall report Production by submitting valid message via Messaging Service (FTP, Web Service, SMTP).

Balance Settlement System shall perform technical and business validations and report the result to the Market participant by generating and delivering Acknowledgement message. When receiving Acknowledgement message, the Market participant user shall logon to the Online Service where the previously submitted and validated data shall be available for review. The Market participant user shall review the data in Online Service and verify that it matches with the data submitted via Messaging Service.

Expected results

- 1. Acknowledgement content states fully accepted message (Reason Code: A01 OK)
- 2. Data visible via Online Service matches with the data submitted via Messaging Service

Test steps

- 1. Submit Message via Messaging Service data flow interface
- 2. Receive positive acknowledgment from Messaging Service
- 3. Review it is shown correctly in Online Service



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6.4.3 Submit hourly metered consumption per MGA per RE

Summary

Market participant acting in DSO role shall report Metered Consumption per MGA by submitting valid message via Messaging Service (FTP, Web Service, SMTP). Message can contain any business type relevant to market participant.

Balance Settlement System shall perform technical and business validations and report the result to the Market participant by generating and delivering Acknowledgement message. When receiving Acknowledgement message, the Market participant user shall logon to the Online Service where the previously submitted and validated data shall be available for review. The Market participant user shall review the data in Online Service and verify that it matches with the data submitted via Messaging Service.

Expected results

- 1. Acknowledgement content states fully accepted message (Reason Code: A01 OK)
- 2. Data visible via Online Service matches with the data submitted via Messaging Service

Test steps

- 1. Submit Message via Messaging Service data flow interface
- 2. Receive positive acknowledgment from Messaging Service
- 3. Review it is shown correctly in Online Service

6.4.4 Submit consumption (profiled/metered)

Summary

Market participant acting in DSO role in Finland and Norway shall report metered and profiled Consumption (preliminary or final) by submitting valid message via Messaging Service (FTP, Web Service, SMTP). In Sweden TSO (Svenska Kraftnät) reports profiled consumption on behalf of the Swedish DSOs.

Balance Settlement System shall perform technical and business validations and report the result to the Market participant by generating and delivering Acknowledgement message. When receiving Acknowledgement message, the Market participant user shall logon to the Online Service where the previously submitted and validated data shall be available for review. The Market participant user shall review the data in Online Service and verify that it matches with the data submitted via Messaging Service.

Expected results

- 1. Acknowledgement content states fully accepted message (Reason Code: A01 OK)
- 2. Data visible via Online Service matches with the data submitted via Messaging Service

Test steps

- 1. Submit Message via Messaging Service data flow interface
- 2. Receive positive acknowledgment from Messaging Service
- 3. Review it is shown correctly in Online Service

6.4.5 Receive MGA imbalance

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Market participant acting in DSO role shall receive MGA Imbalance. Balance Settlement System shall send final MGA Imbalance via preferred channel to the all DSOs with data relevant to them. These messages are sent on Thursdays at 13:00 CET / 14:00 EET.

Expected results

Market participant receives valid message via their preferred communication channel and the content corresponds submitted data. Market participant sends an Acknowledgment message in response.

Test steps

- 1. Market participant's system receives the message
- 2. Market participant verifies that it contains valid data
- 3. Market participant's system sends an Acknowledgement message to Balance Settlement System

6.4.6 Receive MGA exchange confirmation report

Summary

Market participant acting in DSO role shall receive MGA Exchange Confirmation Report. Balance Settlement System shall send MGA Exchange Confirmation Reports via preferred channel to the all DSOs with data relevant to them. These messages are sent on Thursdays at 13:00 CET / 14:00 EET.

Expected results

Market participant receives valid message via their preferred communication channel and the content corresponds submitted data. Market participant sends an Acknowledgment message in response.

Test steps

- 1. Market participant's system receives the message
- 2. Market participant verifies that it contains valid data
- 3. Market participant's system sends an Acknowledgement message to Balance Settlement System

6.4.7 Report hourly values manually via Online Service

Summary

Market participant acting in DSO role shall submit values via Online Service by typing the hourly values manually. Data for following market entity connections can be submitted:

- MGA Exchange
- Production
- Consumption

Expected results

Data can be submitted via Online Service by typing the hourly values manually.

Test steps

- 1. Navigate and log in to Online Service
- 2. Navigate to submit Bilateral Trade information
- Type values
 Save data



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6.4.8 Report hourly values by uploading a file via Online Service

Summary

Market participant acting in DSO role shall submit values via Online Service by uploading the message containing hourly values. Following data flows can be uploaded:

- MGA Exchange
- Production
- Consumption

Expected Results

Data can be submitted via Online Service by uploading the message file of the hourly values.

Test steps

- 1. Navigate and log in to Online Service
- 2. Navigate to submit Bilateral Trade information
- 3. Type values
- 4. Save data

6.4.9 Verify MGA Imbalance calculation results

Summary

Market participant acting in DSO role is able to verify its MGA imbalance results (volumes) from Online Service (including drilldowns).

Note: Additional help with navigating in Online Service can be found from Online Service User Guide documentation available at <u>www.esett.com/materials</u>

Expected Results

All calculations (including aggregations in different drilldown levels) are correct, data is correct and functionalities of Online Service work flawlessly.

Test steps

- 1. Navigate and log in to Online Service
- 2. Navigate to MGA Imbalance view
- 3. Perform drilldowns to verify all aggregations and input data related to MGA imbalance(s) calculation
- 4. Navigate to Balance Report
- 5. Perform all market entity connections related MGA imbalance(s) calculation

7 Free testing

Free testing is the final phase of OTR which aims to give a chance for free testing of the system. There will be no artificial limitations and all the gate closures are in place as described in NBS Handbook. All the same



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test cases than during Structure data verification and Shadow settlement can be carried out during Free testing.

Two main objectives in Free testing are to give market participants to correct possible issues with their structures and in the other hand give a possibility to simulate production like setup in preparation for Parallel Run and further Go-Live.

7.1 Important notices and limitations

- Gate closures are in place according to NBS Handbook.
- All services are in non-restricted mode and available for testing.
- During free testing, structural changes are not allowed unless the change corresponds to real market change as these structures will be used for Parallel run and Go-Live.
- Any changed made during Free testing will have impact on Go-Live and Parallel Run phases structures.
- Testing production like reporting is strongly encouraged.
- Market participants are responsible of the correctness of submitted data and structures.
- The status and condition of the settlement structures, as they are at the end of Free testing period, shall form the baseline for Parallel Run and Go-Live.



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7.2 Approach to testing

Free testing does not incorporate any pre-defined model or schedule how the testing should be carried out, other than the practices described in NBS Handbook. Picture below illustrates the reporting practices in NBS model. More details of reporting practices can be found from <u>www.esett.com/handbook</u>



* National practices applies, see NBS Handbook for details

It is expected that market participants report data from week 23 to week 25 according to the NBS model. The testing activities itself start at the beginning of week 24 (13th June 2016) by reporting data to previous week. eSett performs similar activities according to reporting practices towards market participants.

8 Support during OTR

Chapter 3 in Commissioning plan describes details of eSett's support. Commissioning plan can be found from http://www.esett.com/commissioning/

