

# GPW WATS 2.0

Dress Rehearsal

Description tests

Date: 05/09/2025 | Version: GPW 2.0

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## 1. DISCLAIMER

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## 2. PREFACE

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### 2.1. DOCUMENT PURPOSE

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The purpose of this document is to describe the activities related to the Dress Rehearsal tests.

The purpose of the Dress Rehearsal tests is to verify whether all applications of the test participants, and ultimately production users of GPW WATS system services, correctly implement the technical aspects of the connection and correctly support the functionalities of the GPW WATS system.

The tests will be conducted using pre-production infrastructure and instruments available in the GPW WATS pre-production environment, corresponding to those listed in the exchange's current trading system. The list of instruments on which the tests will be conducted is provided in this document. Instruments not listed on the list will be available in the GPW WATS system; however, it is recommended to perform operations on instruments listed.

The tests will be carried out with the participation of both Processing Centres where the GPW WATS system is available.

Orders in the GPW WATS system **will not be carried over from Friday** to the Dress Rehearsal on Saturday. This means that all order books will be empty when the GPW WATS system is launched on the Dress Rehearsal day.

All transactions concluded during the Dress Rehearsal will be submitted to the settlement system. In addition, contract card files will be generated and made available to Exchange Members.

After the Dress Rehearsal is completed, orders will be deleted from the GPW WATS system in the PrePROD environment.

After the test session is complete, it is the customer's responsibility to verify that the session has completed and that the customer application is ready.

All clients are required to complete and submit a post-test report.

## 2.2. ASSOCIATED DOCUMENTS

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GPW WATS 1.01 Trading System is a part of GPW WATS documentation set.

Please check the following documents to learn about the construction of Trading System.

- GPW WATS 1.01 Trading System (this document).

Please check the documentation of the trading protocols supported by GPW WATS.

- GPW WATS 2.01 Native Order Gateway Specification (this document),
- GPW WATS 2.02 FIX Order Gateway Specification.

Please check the description of the communication with Data Distribution Service.

- GPW WATS 3.01 Market Data Protocol.

Please check the description of the communication with Internet Data Distribution System.

- GPW WATS 3.02 Internet Data Distribution System,
- GPW WATS 3.03 Streaming Messages for IDDS,
- GPW WATS 3.04 Rest API Messages for IDDS.

Please check the additional documentation, which explains other services provided within GPW WATS.

- GPW WATS 4.01 Drop Copy Gateway,
- GPW WATS 4.02 Post Trade Gateway,
- GPW WATS 5.01 Risk Management Gateway.

Please check the additional documentation describing the following:

- GPW WATS 2.03 Rejection Codes,
- GPW WATS 2.04 BenDec Message Definition Format,
- GPW WATS 4.03 Contract Notes,
- GPW WATS 6.01 Connectivity,
- GPW WATS 6.02 (ENG) Short Code Record Keeping,
- GPW WATS 6.03 Short-Long Mapper User Guide.

### 3. DOCUMENT HISTORY

| Version | Date       | Description                                                          |
|---------|------------|----------------------------------------------------------------------|
| 1.0     | 14/08/2025 | The initial publication of the documentation.                        |
| 1.1     | 27/08.2025 | Update of document. Change of the hour of simulation of the incident |
| 2.0     | 05/09/2025 | Update of document                                                   |
|         |            |                                                                      |
|         |            |                                                                      |
|         |            |                                                                      |
|         |            |                                                                      |

## 4. INTRODUCTION

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### 4.1. TEST PARTICIPANTS

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All entities using GPW WATS Services participate in the tests:

- Members of the Stock Exchange ( Exchange Members)
- BondSpot Exchange Members
- Data Vendors (DV)
- Authorized Service Providers
- National Depository for Securities (KDPW)
- KDPW\_CCP
- Polish Financial Supervision Authority (KNF- PFSA)
- BondSpot
- GPW Benchmark (GPWB)

### 4.2. TEST COMPLETION DATES

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The Dress Rehearsal tests will take place on the following dates:

- August 30, 2025 (participation optional),
- September 13, 2025 (participation optional),
- October 4, 2025 (participation obligatory),
- October 25, 2025 (participation obligatory).

### 4.3. REGISTRATION OF TEST PARTICIPANTS

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Customers are required to register their participation in the Dress Rehearsal by submitting an application via the form available on the Project Portal (template in Annex 1 to this document) or by providing the information entered in this annex in the Service Desk system.

### 4.4. COMMUNICATION BETWEEN TEST PARTICIPANTS

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- The Customer Support Team will be available from 7:00 a.m. to 7:00 p.m.
- If you have any questions regarding the Dress Rehearsal, please contact the WATS Support Team via the ServiceDesk system : <https://WATSSupport.gpw.pl/> or via email: [ts@gpw.pl](mailto:ts@gpw.pl).

### 4.5. ASSUMPTIONS FOR THE DRESS REHEARSAL TESTS

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- Orders placed by Exchange Members and BondSpot Members on the Friday preceding the Dress Rehearsal tests will be cancelled by the WSE and BondSpot at the end of the trading day in the PrePROD environment of the WSE WATS system;
- The following markets will be available during testing:
  - WSE markets
  - BondSpot markets ( Catalyst )
- The entities indicated in point 4.1 must participate in the tests,
- Tests organised with the participation of GPW Clients' production IT systems connected to the Pre-PROD environment of the GPW WATS system;

- Tests are organised according to the schedule provided later in this document and on the instruments indicated below;
- All test participants, while implementing the schedule, monitor the correct operation of the IT systems involved, as well as production systems;
- All transactions concluded during the Dress Rehearsal will be sent to KDPW/KDPW\_CCP;
- BondSpot Market Members .
- After the Dress Rehearsal is completed, orders will be deleted from the GPW WATS system in the PrePROD environment .
- After completing the tests, each participant is required to complete the Dress Rehearsal Test Report, which will be made available on the day of the tests on the Project Portal (Dress Rehearsal Results Report menu);

#### 4.6. FUNCTIONAL AND TECHNICAL SCOPE OF TESTS

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- Correct connection to GPW WATS Services before the start of the trading session;
- Verification of the correctness of connection to GPW WATS Services
- Entering orders, receiving order confirmations, handling full and partial order execution (various types of orders);
- Sending order modifications: unfulfilled and partially fulfilled orders, receiving a confirmation message about order modification (orders of various types),
- MassQuote order handling (placing and canceling orders using MassQuote and Order MassCancel);
- Cancellation of an order, receipt of an order cancellation message;
- Handling orders during various phases of the session and during instrument suspensions ;
- Entering an order for a block trade
- Cancelling an order for a block transaction
- Cross trades
- Correct disconnection from GPW WATS Services after the end of the trading session;
- Downloading and processing contract cards made available in the 4Brokernet system (if this is a key element of post-session processing for the test participant);
- Short mappings Code <> LongCode (Exchange Members)
- Receiving information about possible deficiencies in the Short mapping Code – Long Code and data completion between 5:00 p.m. and 7:00 p.m. (applies only to Exchange Members and Bond Spot Members).

## 4.7. SUCCESS CRITERIA FOR THE DRESS REHEARSAL TESTS

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1. **Correct connection to GPW WATS Services before the start of the session in the Pre-PROD environment of the GPW WATS system, i.e. confirmation of connectivity with private ports and the Market Data multicast port.**
2. **Continuity in connecting to GPW WATS Services to the Primary WA3 Data Center in terms of order processing (Order Gateway, Drop Copy Gateway) - until a simulated failure and after switching to the Backup Data Center.**
3. **Continuous receiving of public data from the Market Data Gateway at the Primary WA3 Data Center, i.e., confirmation that market data is being received by the appropriate applications via all communication methods for all relevant markets.**
4. **Switching to the Backup Data Center WA2 after the WSE announces a Failure simulation.**
5. **After losing connection with the Primary Data Center (WA3), connect to the Backup Data Center (WA2) and rebuild the spreadsheet state based on the data received from the backup site.**
6. **Confirm that client-side applications manage failover and operate as expected. This confirmation should be performed for the connection to the Primary Data Center (WA3) and subsequent recovery of data to the Backup Data Center (WA2) after scheduled failovers.**
7. **Continuity in connecting GPW WATS Services to the Backup Data Center (WA3) in the scope of order processing (Order Gateway, Drop Copy Gateway).**
8. **Continuous receiving of public data from the Market Data Gateway from the Backup Data Center (WA2).**
9. **Correct disconnection from GPW Services after the end of the session in the Pre-PROD GPW WATS environment;**
10. **After the tests, on Monday, no later than 8:00 p.m., the Dress Rehearsal Test Report will be completed via the Project Portal, regardless of test results.**

## 4.8. MONITORING WEEKEND ACTIVITY

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Customers will be kept informed about the progress of the Dress Rehearsal throughout the day via the website: [www.gpwwats.pl](http://www.gpwwats.pl) and via text messages sent by Market Data. (TBC)

## 4.9. TEST PLAN

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Customers are required to ensure that their systems can handle failovers, i.e., failovers to the Backup Data Center (WA2) that will be triggered during the test, a simulated failure of the Primary Data Center (WA3) and subsequent recovery of systems to the Backup Data Center (WA2).

In order to generate market data, orders are planned to be placed and transactions concluded in accordance with the test plan.

## 5. SCHEDULE – DRESS REHEARSAL SCENARIO (IN THE GPW WATS SYSTEM)

### 5.1. REFERENCE DATA

Reference data (including the benchmark price) will be published in the Market Data channel on the day of the Dress Rehearsal for the Dress Rehearsal.

### 5.2. SCHEDULE – DRESS REHEARSAL SCENARIO

Please note that all times listed in the schedule below are approximate and subject to change throughout the day. Confirmation and any schedule changes will be communicated via email. Communication will also take place via text messages generated via the WATS trading system.

| No. | Time            | Action                                                                                                               | Description - additional information                                                                                                                                                                                                                                                                                        |
|-----|-----------------|----------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1   | 06:00 a.m.      | Launch of the GPW WATS system                                                                                        | <ul style="list-style-type: none"> <li>Receiving reference data after joining the Market Data service</li> </ul>                                                                                                                                                                                                            |
| 2   | 06:00 a.m.      | <b>Client</b> systems connection to <b>the primary Data Center (WA3)</b>                                             | <ul style="list-style-type: none"> <li>Confirmation that client-side applications are managing access connections correctly and are operating as expected.</li> <li>Confirmation must be performed for connection to <b>the Primary Data Center (WA3)</b></li> </ul>                                                        |
| 3   | 08:30 a.m.      | Start of session according to standard session schedules                                                             | <ul style="list-style-type: none"> <li>Operations of placing orders, concluding transactions - specified for reporting test results in the Report - constituting <b>Appendix No. 2</b>, on the instruments indicated below</li> </ul>                                                                                       |
| 4   | 01:30 p.m.      | Failure – simulation of loss of connection to the primary center<br><b>Switching to the Backup Data Center (WA2)</b> | <ul style="list-style-type: none"> <li>Switching to the second center</li> <li>Confirmation that client-side applications manage failover and operate as expected.</li> <li>Confirmation should be made after successful data recovery in <b>the Backup Data Center (WA2)</b>, after planned simulated failovers</li> </ul> |
| 5   | After 3:30 p.m. | Continuation of the session from the second <b>Data Center (WA2)</b>                                                 | <ul style="list-style-type: none"> <li>Resumption of trading by the WSE</li> <li>Operations of placing orders, concluding transactions</li> </ul>                                                                                                                                                                           |
| 6   | 5:30 p.m.       | End of session                                                                                                       |                                                                                                                                                                                                                                                                                                                             |
| 7   | After 5:30 p.m. | Sending the reports by clients                                                                                       |                                                                                                                                                                                                                                                                                                                             |



### 5.3. LIST OF INSTRUMENTS USED DURING TESTING

| WIG20 Shares                   |           |                  |                                            |
|--------------------------------|-----------|------------------|--------------------------------------------|
| ISIN code                      | Product   | Name             | Min. Value/volume of a block trades in PLN |
| PLKGHM000017                   | KGHM      | KGH C.XWAR       | n/a                                        |
| PLKGHM000017                   | KGHM      | KGH B.XWAR       | 1,500,000                                  |
| PLKGHM000017                   | KGHM      | KGH X.XWAR       | n/a                                        |
| PLOPTTC00011                   | CDPROJEKT | CDR C.XWAR       | n/a                                        |
| PLOPTTC00011                   | CDPROJEKT | CDR B.XWAR       | 1,500,000                                  |
| PLOPTTC00011                   | CDPROJEKT | CDR X.XWAR       | n/a                                        |
| mWIG40 Shares                  |           |                  |                                            |
| ISIN code                      | Product   | Name             |                                            |
| PL11BTS00015                   | 11BIT     | 11B C.XWAR       | n/a                                        |
| PL11BTS00015                   | 11BIT     | 11B B.XWAR       | 500,000                                    |
| PL11BTS00015                   | 11BIT     | 11B X.XWAR       | n/a                                        |
| PLBNFTS00018                   | BENEFIT   | BFT C.XWAR       | n/a                                        |
| PLBNFTS00018                   | BENEFIT   | BFT B.XWAR       | 500,000                                    |
| PLBNFTS00018                   | BENEFIT   | BFT X.XWAR       | n/a                                        |
| Subscription Rights Continuous |           |                  |                                            |
| ISIN code                      | Product   | Name             |                                            |
| PLPLSEP00138                   | PEPP      | PEPP C.XWAR      |                                            |
| Shares Double Auction          |           |                  |                                            |
| ISIN code                      | Product   | Name             |                                            |
| PLNFI0800016                   | 08OCTAVA  | 08N C.XWAR       | n/a                                        |
| PLNFI0800016                   | 08OCTAVA  | 08N B.XWAR       | 75,000                                     |
| PLNFI0800016                   | 08OCTAVA  | 08N X.XWAR       | n/a                                        |
| NewConnect Continuous          |           |                  |                                            |
| ISIN code                      | Product   | Name             |                                            |
| PL7LVLS00017                   | 7LEVELS   | 7LV C.XNCO       | n/a                                        |
| PL7LVLS00017                   | 7LEVELS   | 7LV B.XNCO       | 75,000                                     |
| PL7LVLS00017                   | 7LEVELS   | 7LV X.XNCO       | n/a                                        |
| NewConnect Double Auction      |           |                  |                                            |
| ISIN code                      | Product   | Name             |                                            |
| PLMBFCR00018                   | MBFGROUP  | MBF C.XNCO       | n/a                                        |
| PLMBFCR00018                   | MBFGROUP  | MBF B.XNCO       | 75,000                                     |
| PLMBFCR00018                   | MBFGROUP  | MBF X.XNCO       | n/a                                        |
| Catalyst Continuous            |           |                  |                                            |
| ISIN code                      | Product   | Name             |                                            |
| PL0000113460                   | PS1026    | PS1026 C.WBON    | n/a                                        |
| PL0000113460                   | PS1026    | PS1026 B.WBON    | 75,000                                     |
| PL0000113460                   | PS1026    | PS1026 X.WBON    | n/a                                        |
| Catalyst ATS Continuous        |           |                  |                                            |
| ISIN code                      | Product   | Name             |                                            |
| PLCFRPT00070                   | CPS0130   | CPS0130 C.WMTF   | n/a                                        |
| PLCFRPT00070                   | CPS0130   | CPS0130 B.WMTF   | 75,000                                     |
| PLCFRPT00070                   | CPS0130   | CPS0130 X.WMTF   | n/a                                        |
| ETF                            |           |                  |                                            |
| ISIN code                      | Product   | Name             |                                            |
| PLBEW2L00019                   | ETFBW20LV | ETFBW20LV C.WETP | n/a                                        |
| PLBEW2L00019                   | ETFBW20LV | ETFBW20LV B.WETP | 75,000                                     |
| PLBEW2L00019                   | ETFBW20LV | ETFBW20LV X.WETP | n/a                                        |
| Market Maker Certificates      |           |                  |                                            |

| ISIN code               | Product     | Name               |             |
|-------------------------|-------------|--------------------|-------------|
| PLINGNV51805            | INTLAE51805 | INTLAE51805 H.WETP | n/a         |
| AT0000A38MK9            | RBIPKN1225  | RBIPKN1225 H.WETP  | n/a         |
| <b>In/aex Futures</b>   |             |                    |             |
| ISIN code               | Product     | Name               |             |
| PLoGF0031252            | FW20U2520   | FW20U2520 C.WDER   | n/a         |
| PLoGF0031252            | FW20U2520   | FW20U2520 B.WDER   | 150 pcs.    |
| PLoGF0031252            | FW20U2520   | FW20U2520 X.WDER   | n/a         |
| <b>Stock Futures</b>    |             |                    |             |
| ISIN code               | Product     | Name               |             |
| PLoGF0031625            | FKGHU25     | FKGHU25 C.WDER     | n/a         |
| PLoGF0031625            | FKGHU25     | FKGHU25 B.WDER     | 400 pcs.    |
| PLoGF0031625            | FKGHU25     | FKGHU25 X.WDER     | n/a         |
| <b>Currency Futures</b> |             |                    |             |
| ISIN code               | Product     | Name               |             |
| PLoGF0031930            | FEURZ25     | FEURZ25 C.WDER     | n/a         |
| PLoGF0031930            | FEURZ25     | FEURZ25 B.WDER     | 10,000 pcs. |
| PLoGF0031930            | FEURZ25     | FEURZ25 X.WDER     | n/a         |
| <b>Options</b>          |             |                    |             |
| PLoGO0321218            | OW20I252800 | OW20I252800.C.WDER |             |
| PLoGO0349524            | OW20R263000 | OW20R263000.C.WDER |             |
| PLoGO0349482            | OW20R262900 | OW20R262900.C.WDER |             |

## 5.4. MARKET MAKER SYSTEM

Instruments for which the presence of a market maker is necessary to conclude the trades (according to the Warsaw Trading Rules, only one is allowed; for testing purposes, access was granted to a larger group of exchange members).

| ISIN code    | Product     | Name               | Animators          |
|--------------|-------------|--------------------|--------------------|
| PLINGNV51805 | INTLAE51805 | INTLAE51805 H.WETP | 734, 915, 920, 954 |
| AT0000A38MK9 | RBIPKN1225  | RBIPKN1225 H.WETP  | 702, 734, 915, 954 |

## 5.5. BLOCK TRADES

Block trades can be made on all instruments available in the system.

## 5.6. EXPECTED ACTIONS IN EACH PHASE OF THE SESSION

| Session phase                                         | Expected action                                                                                                                                                                                                                                                                                          | Monitoring activities                                                                                                                                                                                          |
|-------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Early Monitoring</b><br>(no trading)               | Unable to place orders. Receiving reference data. It is possible to receive a text message sent by the WSE.                                                                                                                                                                                              |                                                                                                                                                                                                                |
| <b>Opening Auction Phase</b><br>(Opening , Intraday ) | <ul style="list-style-type: none"> <li>Entering of orders by Exchange Members admitted in this phase of the session. Use of all order types, validity and execution conditions.</li> <li>Modification of entered orders.</li> <li>Deleting orders.</li> <li>Placing orders as a Market Maker.</li> </ul> | <ul style="list-style-type: none"> <li>Checking the correctness of entered orders and their modifications.</li> <li>Observation of the WATS system response to actions inconsistent with additional</li> </ul> |

|                                                                                                                                                                                                                                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p>Auctions (Auctions following Volatility Halt or Auctions following Unsuspension of an instrument)</p> <p>At the end of the opening auction phase, the single price is determined, orders are executed and the transaction is concluded.</p> | <ul style="list-style-type: none"> <li>• Concluding block trades on instruments (does not apply to derivatives and ETFs).</li> <li>• TOV and TOP analysis</li> <li>• At the end of the opening auction phase/closing auction phase, the opening price/closing price, respectively, is determined, orders are executed and the transaction is concluded.</li> <li>• Brokerage orders that meet the execution conditions are executed at a price equal to the opening price/closing price, respectively.</li> <li>• If the highest limit price in a buy order is lower than the lowest limit price in a sell order, or if there are only buy orders or only sell orders, or if there are no orders (a divergent market), the opening price is the price of the first transaction concluded in a given session, and the closing price is the price of the last transaction concluded in a given session. If no transactions were concluded in a given session, the opening and closing prices are not determined.</li> <li>• All orders not executed in the opening auction phase are transferred to the continuous trading phase, unless the terms of execution of a given order state otherwise.</li> <li>• All orders not executed in the closing auction phase will be transferred to the next trading phase, unless the terms of execution of a given order state otherwise.</li> <li>• Observing the opening. Paying particular attention to the execution of transactions at the opening, as well as instrument statuses and automatic changes to the TOP spreads outside the static spreads.</li> </ul> | <p>conditions for orders, e.g. rejection of an order with incorrect parameters.</p> <ul style="list-style-type: none"> <li>• Control of the minimum block trade value and the deviation between the share price in the order and the last reference price.</li> </ul>                                                                                                                                                                                                                                                 |
| <p><b>Continuous Trading</b><br/>Continuous Trading Phase</p>                                                                                                                                                                                  | <ul style="list-style-type: none"> <li>• Placing orders and concluding transactions by Exchange Members. Utilization of all order types, validity, and execution conditions.</li> <li>• Modification of entered orders.</li> <li>• Deleting selected orders.</li> <li>• Placing orders as a Market Maker.</li> <li>• Concluding block trades.</li> <li>• During the continuous trading phase, new broker orders may be submitted to the stock exchange and existing orders in the order book may be modified and cancelled.</li> <li>• Orders are executed in this phase in accordance with the priority of price and then the priority of time of acceptance into the order book, subject to the provisions of the Warsaw Trading Rules.</li> <li>• In the continuous trading phase, transactions are concluded at the price of the best opposite order waiting to be executed in the order book, subject to the provisions of the Warsaw Trading Rules.</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | <ul style="list-style-type: none"> <li>• Checking the correctness of transactions concluded at the opening based on submitted orders.</li> <li>• Monitoring the correctness of submitted orders and their modifications.</li> <li>• Observing the system's response to actions that are inconsistent with conditions.</li> <li>• Control of the minimum block trade value and the deviation between the share price in the order and the last share price from the trading session or the reference price.</li> </ul> |

|                                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                          |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p><b>Closing Auction Phase</b></p> <p>Auctions (Auctions following Volatility Halt or Auctions following Unsuspension of an instrument)</p> <p>At the end of the closing auction phase, the single price is determined, orders are executed and the transaction is concluded.</p> | <ul style="list-style-type: none"> <li>• Exchange Members permitted in this phase of the session can place orders. All order types, validity periods, and execution conditions can be used.</li> <li>• Modification of entered orders.</li> <li>• Deleting orders.</li> <li>• Placing orders as a Market Maker.</li> <li>• Concluding block trades on instruments (does not apply to derivatives and ETFs ).</li> <li>• TOV and TOP analysis</li> <li>• At the end of the closing auction phase, the opening/closing price is determined, orders are executed and the transaction is concluded.</li> <li>• Brokerage orders that meet the execution conditions are executed at a price equal to the opening price/closing price, respectively.</li> <li>• If the highest limit price in a buy order is lower than the lowest limit price in a sell order, or if there are only buy orders or only sell orders, or if there are no orders (a divergent market), the opening price is the price of the first transaction concluded in a given session, and the closing price is the price of the last transaction concluded in a given session. If no transactions were concluded in a given session, the opening and closing prices are not determined.</li> <li>• All orders not executed in the opening auction phase are transferred to the continuous trading phase, unless the terms of execution of a given order state otherwise.</li> <li>• All orders not executed in the closing auction phase will be transferred to the next trading phase, unless the execution conditions for a given order state otherwise.</li> <li>• Observe the closing phase. Pay particular attention to the execution of trades at the opening, as well as instrument statuses and automatic changes to the TKO spreads outside the static spreads.</li> </ul> | <ul style="list-style-type: none"> <li>• Checking the correctness of entered orders and their modifications.</li> <li>• Observation of the WATS system response to actions inconsistent with additional conditions for orders, e.g. rejection of an order with incorrect parameters.</li> <li>• Control of the minimum block trade value and the deviation between the share price in the order and the last reference price.</li> </ul> |
| <p>Trading at Last</p>                                                                                                                                                                                                                                                             | <ul style="list-style-type: none"> <li>• Placing, modifying, and canceling orders. Using the order types available in this phase of the session. Attempting to place limit orders exceeding the applicable limit. Concluding a transaction.</li> <li>• In the continuous trading system, an extra-trade is organised for financial instruments for which a closing price was determined during the closing auction phase, with the exception of derivatives on WIBOR reference rates and derivatives on short-term, medium-term and long-term Treasury bonds.</li> <li>• During the trading phase, it is possible to place both limit and no-limit orders.</li> <li>• During the trading phase, previously placed brokerage orders can be canceled and modified.</li> <li>• During the extra-time phase, transactions are concluded at a price equal to the last closing price.</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | <p>Checking the correctness of concluded transactions</p>                                                                                                                                                                                                                                                                                                                                                                                |

|                                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                                                                                                                                       |
|---------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------|
| Late Monitoring<br>(no trading) | <ul style="list-style-type: none"><li>• Unable to place orders. Block trades on instruments for which this is permitted.</li><li>• The final phase of the market in which the Exchange can continue to cooperate with the Trading System and perform tasks before trading ends.</li><li>• Some order or transaction activity may be observed in the event of a transaction cancellation procedure.</li><li>• In this phase, orders with a maturity date on the current day as well as orders after the corporate action procedure may be automatically canceled by the Trading System.</li></ul> | <ul style="list-style-type: none"><li>• Minimum block trade value control. Extended volatility range control for specific instrument types.</li></ul> |
| Market Closed<br>(no trading)   | Unable to place orders.<br>It is possible to receive a text message sent by the WSE.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                                                                                                                                       |

## 5.7. TRADING SCHEDULES

The trading schedules for individual segments will reflect the current schedules in the WATS – PrePROD system, i.e. according to the following schedules:

| 1) continuous trading (excluding derivatives, debt financial instruments and ETFs): |                                                               |
|-------------------------------------------------------------------------------------|---------------------------------------------------------------|
| 8:30 a.m. - 9:00 a.m.                                                               | Opening auction phase (including opening price determination) |
| 9:00 a.m. - 4:50 p.m.                                                               | Continuous trading phase                                      |
| 4:50 p.m. - 5:00 p.m.                                                               | Closing auction phase (including closing price determination) |
| 5:00 p.m. - 5:05 p.m.                                                               | Extra time phase                                              |

| 2) continuous trading for derivative instruments |                                                               |
|--------------------------------------------------|---------------------------------------------------------------|
| 8:30 a.m. - 8:45 a.m.                            | Opening auction phase (including opening price determination) |
| 8:45 a.m. - 4:50 p.m.                            | Continuous trading phase                                      |
| 4:50 p.m. - 5:00 p.m.                            | Closing auction phase (including closing price determination) |
| 5:00 p.m. - 5:05 p.m.                            | Trading at last phase                                         |

| 3) continuous trading for derivative instruments                                           |                                                               |
|--------------------------------------------------------------------------------------------|---------------------------------------------------------------|
| (i) WIBOR reference rates and (ii) short-term, medium-term and long-term government bonds: |                                                               |
| 8:30 a.m. - 9:00 a.m.                                                                      | Opening auction phase (including opening price determination) |
| 9:00 a.m. - 5:00 p.m.                                                                      | Continuous trading phase                                      |

| 4) continuous trading for debt financial instruments: |                                                               |
|-------------------------------------------------------|---------------------------------------------------------------|
| 8:30 a.m. - 9:00 a.m.                                 | Opening auction phase (including opening price determination) |
| 9:00 a.m. - 4:50 p.m.                                 | Continuous trading phase                                      |
| 4:50 p.m. - 5:00 p.m.                                 | Closing auction phase (including closing price determination) |
| 5:00 p.m. - 5:05 p.m.                                 | Trading at last phase                                         |

| 5) continuous trading for ETFs: |                                                               |
|---------------------------------|---------------------------------------------------------------|
| 8:30 a.m. - 9:05 a.m.           | Opening auction phase (including opening price determination) |
| 9:05 a.m. - 4:50 p.m.           | Continuous trading phase                                      |
| 4:50 p.m. - 5:02 p.m.           | Closing auction phase (including closing price determination) |
| 5:02 p.m. - 5:05 p.m.           | Trading at last phase                                         |

| 6) continuous trading for ETC and ETN instruments: |                                                               |
|----------------------------------------------------|---------------------------------------------------------------|
| 8:30 a.m. - 9:05 a.m.                              | Opening auction phase (including opening price determination) |

|                       |                                                               |
|-----------------------|---------------------------------------------------------------|
| 9:05 a.m. – 4:50 p.m. | Continuous trading phase                                      |
| 4:50 p.m.– 5:02 p.m.  | Closing auction phase (including closing price determination) |
| 5.02 p.m. -5.05 p.m.  | Trading at last phase                                         |

#### 7) quotations in the single-price system with double determination of the single-price:

|                         |                                                                     |
|-------------------------|---------------------------------------------------------------------|
| 8:30 a.m. – 11:00 a.m.  | Opening auction phase (including determination of the single price) |
| 11.00 a.m. – 11.30 a.m. | Trading at last phase                                               |
| 11:30 a.m. – 3:00 p.m.  | Opening auction phase (including determination of the single price) |
| 3:00a.m. – 5:05 p.m.    | Trading at last phase                                               |

#### 8) quotations in the single-price system with a single determination of the single price, subject to paragraph 6:

a) the schedule for determining the single price on the trading day (with the possibility of submitting, modifying and cancelling brokerage orders and concluding stock exchange transactions):

|                        |                                                                     |
|------------------------|---------------------------------------------------------------------|
| 8:30 a.m. - 11:00 a.m. | Opening auction phase (including determination of the single price) |
| 11.00 a.m. - 1.00 p.m. | Trading at last phase                                               |
| 01:00 p.m.– 5:05 p.m.  | Pre-opening phase                                                   |

b) schedule for trading days without determining the single price (with the possibility of placing, modifying and cancelling brokerage orders, but without the possibility of concluding stock exchange transactions):

|                       |                   |
|-----------------------|-------------------|
| 8:30 a.m. – 5:05 p.m. | Pre-opening phase |
|-----------------------|-------------------|

## 5.8. SELECTED QUOTATION PARAMETERS FOR INSTRUMENTS PARTICIPATING IN THE DRESS REHEARSAL TESTS

The parameters for the instruments used in the tests are consistent with the parameterisation available in the document: WATS\_Parametrisation v.1.4, available on the system website:

<https://gpwwats.pl/dokumentacja-i-faq>

## 5.9. APPENDIX 1 – APPLICATION FORM FOR PARTICIPATION IN THE DRESS REHEARSAL TESTS

The attachment will be a separate file.

## 5.10. APPENDIX 2 – SAMPLE REPORT AFTER THE DRESS REHEARSAL TESTS

The attachment will be a separate file.