

MODIFICATIONS TO IT SYSTEMS

of KDPW and KDPW_CCP in 2025

Meeting with Participants
30 October 2024

Agenda



1. Introduction

2. Implementation windows 2025:

- Implementation of the new version of the FpML message standard
- Introduction of new system messages for obtaining information on bid-ask spreads for OTC derivatives for the calculation of add-ons
- Implementation of new solutions supporting General Meetings
- Update of ISO 20022 message versions in the areas of General Meetings and shareholder identification

Implementations planned in 2025 (outside the implementation windows)

- Adaptation of KDPW Group to SORBNET3
- Adaptation of KDPW Group systems to the new trading system WATS (including start of KDPW_CCP's processing of ISO20022 Clearing 3.0 messages)
- Changes in communication links between KDPW Group's IT systems and participants' systems:
 - Modernisation of the handling of access certificates in A2A communication
 - Launch of new applications for participants in the KDPW Group Service Portal

4. New KDPW Group services planned in 2025



2.

Implementation windows 2025



Implementation windows 2025



12-13 April Spring implementation window

- Implementation of the new version of the FpML message standard
- Introduction of new system messages for obtaining information on bid-ask spreads for OTC derivatives for the calculation of addons
- Implementation of new solutions supporting General Meetings

22-23 November Autumn implementation window

 Update of ISO 20022 message versions in the areas of General Meetings and shareholder identification

Spring implementation window (1)



Implementation of the new version of the FpML message standard

Żaneta Skorupska-Świrska, Lucyna Słodka

The FpML message standard in KDPW_CCP's systems is scheduled for modification from the currently used version 5.11 to version 5.12 recommended by ISDA as the latest version. The new version of the FpML will be introduced in response to changing market conditions and to support the planned clearing service for RFR-based OIS which may contain additional characteristics not present in previous versions. The implementation of FpML message version 5.12 is key for the future development of the financial market and compliance with international regulations and trends in transaction clearing and risk management.

Distribution of detailed materials including a description of the processes, structure and examples of FpML and XML messages (letter CCP/ZW/605/2024 of 5 September 2024)

- Opening of the test environment (TSTB KDPW_CCP) and start of testing with KDPW CCP participants
- Roll-out of the new version of the FpML message standard in the production environment

dates

05.09.2024

23.09.2024

12-13.04.2025

Spring implementation window (2)



Introduction of new system messages for obtaining information on bid-ask spreads for OTC derivatives

Paweł Popławski

In 2025, KDPW_CCP will modify the model for calculating margins in non-organised trading (OTC), including the introduction of liquidity and concentration risk add-on calculations. The calculation of the add-ons is based, among others, on data on bid-ask spreads on selected financial instruments and their nominal amounts, which will be sourced from clearing members and exchanged using new system messages.

Publication of a detailed description of the messages under the tab New messages planned in connection with LCRM surveys at www.kdpwccp.pl

- Publication of detailed materials including the margin calculation model for non-organised trading
- Opening of the test environment and start of testing
- Roll-out of the modifications in the production environment

dates

09.2024

up to 15.10.2024

as of 11.2024

12-13.04.2025

Spring implementation window (3)



Implementation of new solutions supporting General Meetings

Michał Krystkiewicz

Project work will continue in 2025 to expand the General Meetings service.

Modifications will be implemented to the ISO 20022 message seev.001.001.11 (MeetingNotification), including the introduction of a new designation for the method of participation in the general meeting "VIRT", which will be used when the company allows for participation in the general meeting via the eVoting application. In addition, the modifications include the processing of optional elements of the above-mentioned message applicable to general meetings of foreign companies.

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 Distribution of detailed materials, including modifications to message ISO 20022 seev.001.001.11 (MeetingNotification) (letter BRB/ZW/9/2024 of 26 April 2024)

04.2024

dates

Distribution of additional detailed materials

12.2024

Opening of the test environment and start of testing

as of 02.2025

Roll-out of the modifications in the production environment

12-13.04.2025

Autumn implementation window



Update of ISO 20022 message versions in the areas of General Meetings and shareholder identification

Michał Krystkiewicz

An update of the ISO 20022 messages in the area of General Meetings and shareholder identification to the version required by SWIFT is planned for November 2025 (as part of a strategic effort to ensure compliance with regulatory requirements for the use of electronic formats which enable interoperability and straight-through processing and with international industry standards such as ISO).

- Distribution of detailed materials on the proposed modifications
- Opening of the test environment and start of testing
- Roll-out of the modifications

dates

05.2025

as of 09.2025

22-23.11.2025

Implementation windows 2025



Q&A





3.

Implementations planned in 2025



Priority projects in 2025

aligning with new third-party systems



Adaptation of KDPW Group to SORBNET3

Joanna Dmowska, Krzysztof Ołdak

The KDPW Group's adaptation to the new SORBNET3 (S3) system being designed by NBP is aimed at ensuring the continuation of central bank clearing and cash settlement in PLN.

In addition, the KDPW Group is developing its business profile to provide new functionalities offered with the launch of the new system, including the possibility of holding multiple accounts in S3 (in the case of banks acting as payer banks, multiple accounts allow for increased flexibility in establishing relationships of direct participants of KDPW and KDPW CCP who do not hold bank accounts with NBP for the purposes of operations performed by the KDPW Group).

As part of the adaptation to SORBNET3, necessary modifications will be made in the KDPW Group's IT systems including the clearing and settlement of transactions in PLN, the payment of benefits from securities in PLN, the settlement in PLN of other operations, and the management of resources of the clearing guarantee system.

Detailed materials, including information on the implementation of the next stages of the project work, are provided in our letters, which are also available on our website:

- regarding KDPW at this link,
- regarding KDPW CCP at this link.

Testing with participants (in addition to the mandatory set of tests required by NBP)

Launch of SORBNET3

dates

12.2024

according to the NBP schedule 09.06.2025

Priority projects in 2025

aligning with new third-party systems



Adaptation of KDPW Group systems to the new trading system WATS

Andrzej Kamiński, Żaneta Skorupska - Świrska

The schedule of project work in the KDPW Group is dependent on the WATS project schedule.

The main system modifications required on your side relate to modifications in ISO20022 Securities Clearing (secl) messages, including:

- updating to the current version of the Clearing 3.0 standard,
- adding the standard KDPW Group message envelope used for other ISO message groups, and
- extending the information content of the messages to meet the requirements of the WATS system.

Distribution of detailed materials on the modifications to the ISO20022 Securities Clearing (secl) messages

- Availability of new versions of ISO20022 Securities Clearing (secl) messages in the test environment TST
- Implementation of the new versions of the (secl) messages will take place in conjunction with the launch of the new WATS system

dates

03.2023

11.2024

according to the GPW WATS schedule

10.11.2025



in KDPW Group communication channels (A2A and U2A model)

Modernisation of the handling of access certificates in A2A communication

Rafał Wawrzyniak

The KDPW Group will finalise in 2025 its project which modernises A2A communication in the area of services for KDPW's direct participants (including ARM services and the Compensation Scheme) and KDPW CCP clearing members.

At the level of the KDPW Group, authentication for MQ communication in KDPW and KDPW_CCP has been separated, which requires users to request a separate certificate to establish A2A communication with KDPW CCP.

In connection with the separation, a new network addressing will also be introduced, separate from the current ESDK system, which will require the establishment of appropriate access in the network infrastructure. Consequently, messages exchanged with KDPW and with KDPW_CCP will require a separate connection to the relevant MQ queues.





•	Distribution of detailed materials, including the specification of the
	MQ configuration in A2A communication, instructions and a
	description of the process for implementing the changes in A2A
	communication

- Distribution of information on the dates of the switchover windows
- Possibility to check the network connections with KDPW and KDPW_CCP
- Roll-out of the modifications to the handling of access certificates in A2A communication for KDPW and KDPW_CCP services (in switchover windows)

dates

02.2024

11.2024

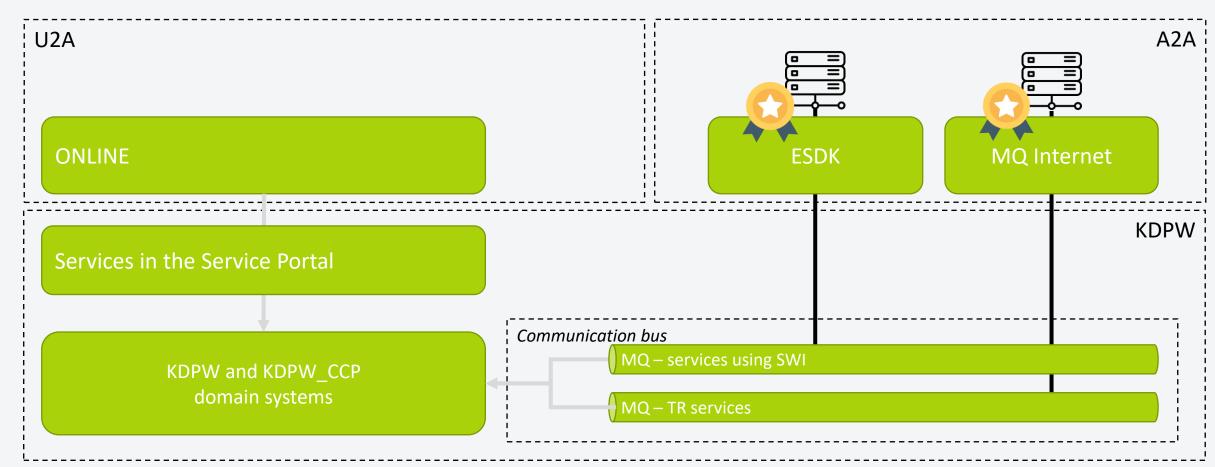
11.2024

Q1 2025



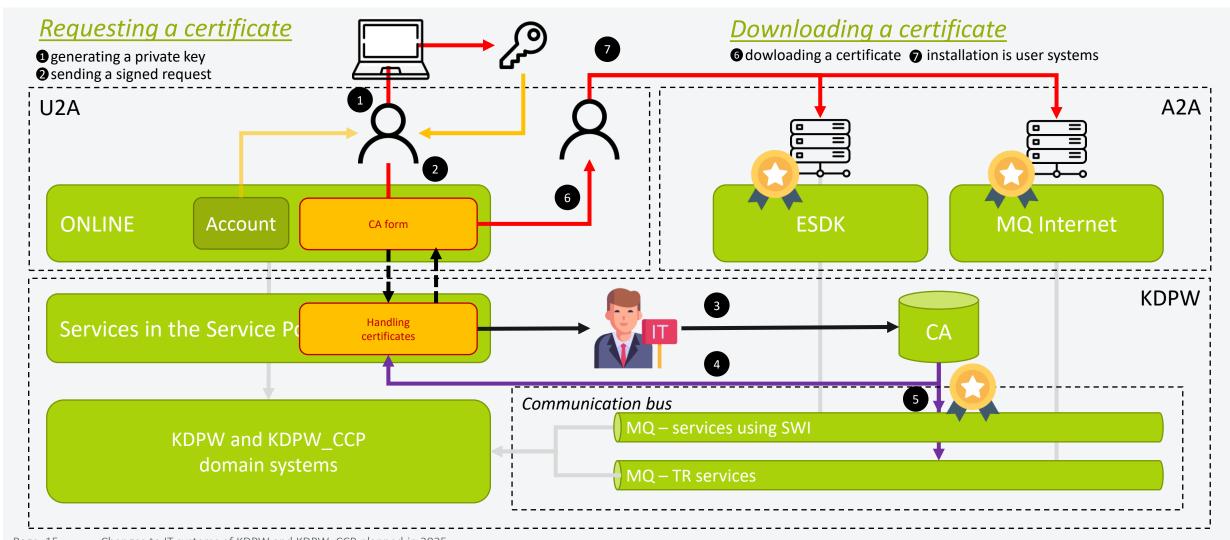
in KDPW Group communication channels (A2A and U2A model)

A2A certificates – authentication in communication between systems





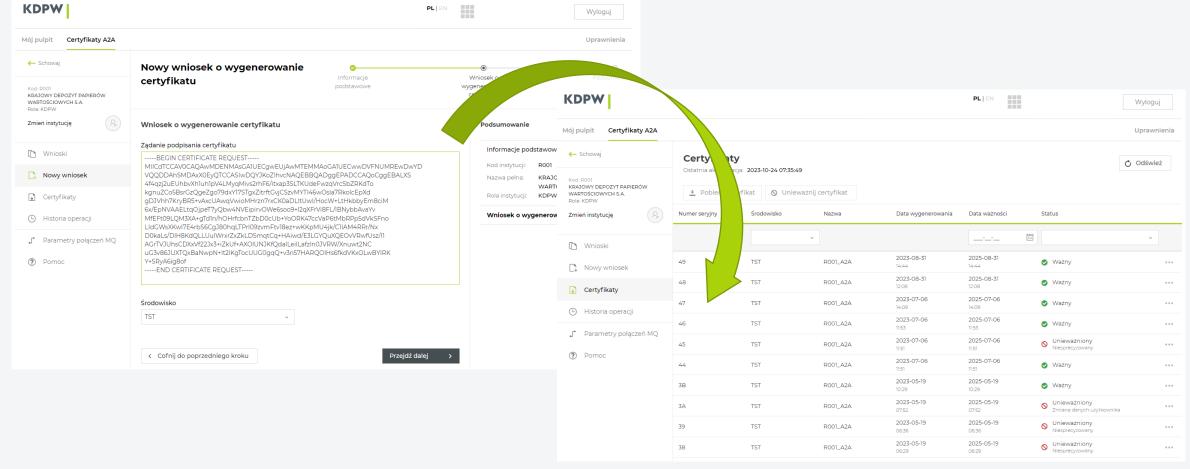
in KDPW Group communication channels (A2A and U2A model)





in KDPW Group communication channels (A2A and U2A model)

Access to certificates for all environments in the production service - online.kdpw.pl





in KDPW Group communication channels (A2A and U2A model)

Separation of service communications between KDPW and KDPW CCP

Project phase I – communication using online certificates

- ETR EMIR Trade Repository reporting services
- ARM ARM reporting services (participants not using SWI communication)
- SFTR SFTR Trade Repository reporting services
- LEI LEI issuance automation services

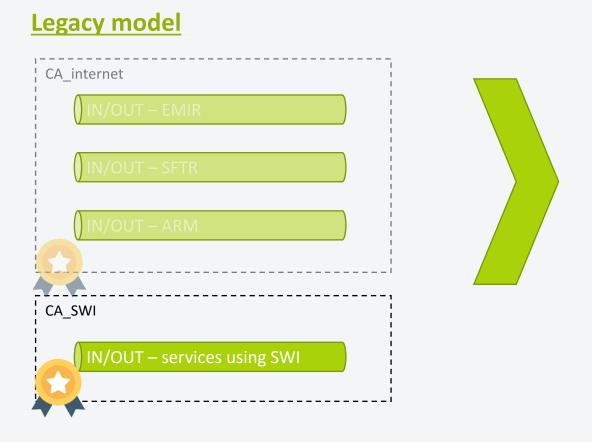
Project phase II – communication using SWI

- CSD core services of the depository and settlement system
- CCP clearing services provided in KDPW_CCP
- ARM ARM reporting services (direct participants reporting to ARM)
- ICS Compensation Scheme services for direct participants

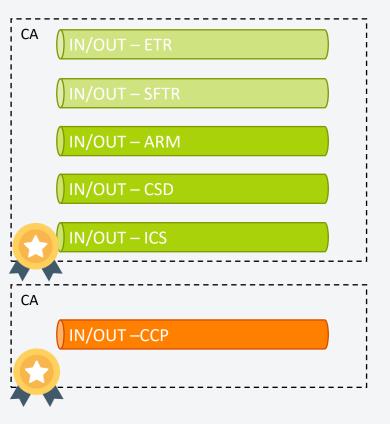


in KDPW Group communication channels (A2A and U2A model)

Separation of service communications between KDPW and KDPW CCP



Target model





in KDPW Group communication channels (A2A and U2A model)

Separation of service communications between KDPW and KDPW CCP

Separation of communication with KDPW services (recipient code – 0001)

Authenticated access to communication queues using a certificate issued by KDPW via a dedicated application and according to the scheme appropriate for KDPW services

○ **SWI -> CSD** — A2A communication for depository services

○ **SWI -> ARM** — A2A communication for ARM services

○ **SWI -> ICS** — A2A communication for the Compensation Scheme

Separation of communication with KDPW_CCP services (recipient code – 0010)

Authenticated access to communication queues using a certificate issued by KDPW_CCP via a dedicated application and according to the scheme appropriate for CCP services

○ **SWI -> CCP** — A2A communication for CCP services (recipient code – 0010)



in KDPW Group communication channels (A2A and U2A model)

Elimination of digital signature in messages under ESDK protocol

ESDK frame – legacy model

Nazwa pola	Długość	Тур
Numer komunikatu	9	N
Data	10	Α
Godzina	8	Α
ID Adresata	10	Α
ID Nadawcy	10	Α
Typ komunikatu	24	Α
Podtyp komunikatu	4	Α
Obszar zarezerwowany	20	Α
Długość danych	8	N
Dane	Długość danych	В
Długość podpisu elektronicznego	8	N
Podpis elektroniczny	Długość podpisu elektronicznego	В

ESDK frame – target model

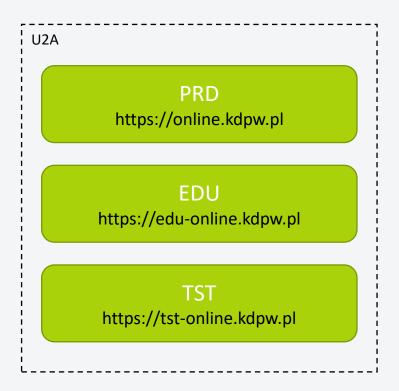
Nazwa pola	Długość	Тур
Numer komunikatu	9	N
Data	10	Α
Godzina	8	Α
ID Adresata	10	Α
ID Nadawcy	10	Α
Typ komunikatu	24	A
Podtyp komunikatu	4	Α
Obszar zarezerwowany	20	Α
Długość danych	8	N
Dane	Długość danych	В



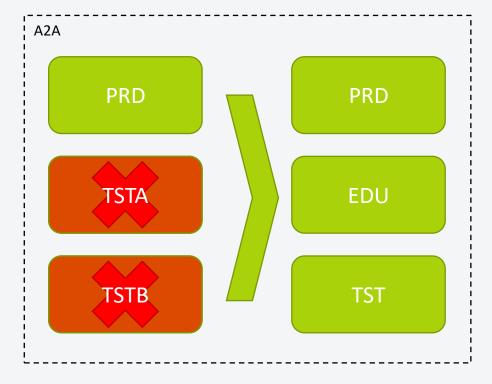
in KDPW Group communication channels (A2A and U2A model)

Standardised names of environments

U2A communication – Service Portal



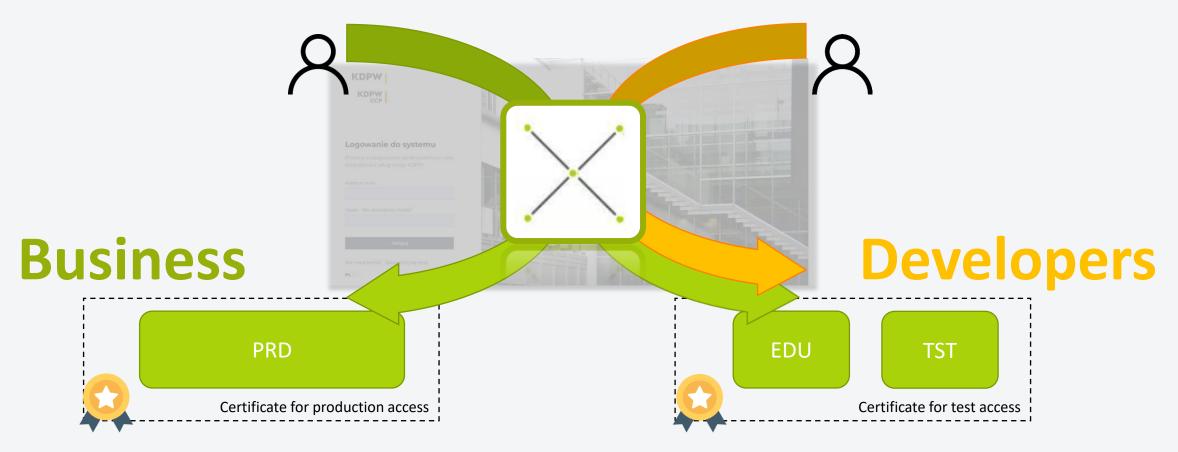
A2A communication — automated message exchange





in KDPW Group communication channels (A2A and U2A model)

Access to certificates for all environments in the production service- online.kdpw.pl





in KDPW Group communication channels (A2A and U2A model)

<u>Communication switchover – downloading certificates</u>





in KDPW Group communication channels (A2A and U2A model)

Launch of new applications for participants in the KDPW Group Service Portal:

CSD services – Direct participant

Krzysztof Ołdak

The KDPW Group will provide a new U2A communication solution: an application for KDPW direct participants, which will eventually cover the core CSD services, in particular the option to send structured XML messages and view sent/received XML messages.

In addition, view access will be available to selected participant data in the depository system.

NOTE: Following the launch of the new applications in the KDPW Group Service Portal, which will take over data exchange functions (system messages and correspondence), the currently used

U2A communication channel ESDI/Web will be decommissioned



• Distribution of detailed materials on the scope of the functionality and the launch of the new application

Launch of the new application with core CSD services

 Transitional period of availability of legacy ESDI/Web and new applications in the Service Portal dates

11.2024

2024/2025

Q1 2025

in KDPW Group communication channels (A2A and U2A model)



New application: CSD services – Direct participant

Application functionalities:

- Viewing current data in the CSD system:
 - Participant's entity accounts
 - Account balances
 - Settlement instructions
 - Asset status change instructions
- List of sent/received xml messages
- Sending xml messages

KDPW KDPW CCP

in KDPW Group communication channels (A2A and U2A model)



New application: CSD services – Direct participant

- 1. Application access: CSD services Direct participant
- 2. Service available in the Service Portal (online.kdpw.pl)
- New application
- Service group for direct participants
- Access permissions granted by the administrator appointed by the participant
- 3. Application permissions: CSD services Direct participant
- Basic User role no permission to send settlement orders
- Verified User role (under AML regulations) Basic User permissions plus sending settlement orders
- For more information on the new Permission Administrator role introduced as of 21 October 2024, visit the tab: Changes to granting application access
- For more information on the terms of establishing U2A communication in the Service Portal, visit our website: https://www.kdpw.pl/pl/u2a.html



in KDPW Group communication channels (A2A and U2A model)

Launch of new applications for participants in the KDPW Group Service Portal:

KDPW correspondence KDPW_CCP correspondence

Andrzej Kamiński

The KDPW Group will launch a new U2A communication solution: new applications for KDPW direct participants and KDPW_CCP clearing members handling file-based correspondence.

NOTE: Following the launch of the new applications in the KDPW Group Service Portal, which will take over data exchange functions (system messages and correspondence), the currently used

U2A communication channel ESDI/Web will be decommissioned





dates

 Distribution of detailed materials on the scope of functionalities and the launch of the new applications

Launch of the new applications for handling file-based correspondence

Transitional period of availability of legacy ESDI/Web and new applications in the Service Portal

11.2024

2024/2025

Q1 2025

KDPW KDPW CCP

in KDPW Group communication channels (A2A and U2A model)





New applications: KDPW correspondence

KDPW_CCP correspondence

Application functionalities:

- transmission of information and declarations of intent by the KDPW Group in the form of unstructured files
- delivery by the KDPW Group to direct participants and clearing members of information on the publication of regulations or amendments thereto on the KDPW and KDPW_CCP websites
- sending of correspondence by participants to various departments of KDPW and KDPW_CCP
- e-mail notifications of new messages (sent each time from the application)
- number of unread messages (presented in the inbox)

in KDPW Group communication channels (A2A and U2A model)



New application: KDPW correspondence



- **1. Application** KDPW correspondence available in the Service Portal (online.kdpw.pl)
- **2.** Application access permissions: granted by the administrator appointed by the participant
- For more information on the new Permission Administrator role introduced as of 21 October 2024, visit the tab: Changes to granting application access
- For more information on the terms of establishing U2A communication in the Service Portal, visit our website: https://www.kdpw.pl/pl/u2a.html

in KDPW Group communication channels (A2A and U2A model)



New application: KDPW_CCP correspondence



1. Application KDPW_CCP correspondence available in KDPW_CCP Core Services in the Service Portal (online.kdpw.pl)

- 2. Application access permissions: granted as part of access to KDPW_CCP Core Services
- The steps in the processing of requests for access to online.kdpw.pl are described on the website: https://www.kdpwccp.pl/pl/aplikacja-gui.html.
- KDPW_CCP Core Services have no administrator function and each user requests service access individually.
- To receive correspondence from KDPW_CCP, each clearing member should have at least one active user of KDPW_CCP Core Services.

4.

New KDPW Group services planned in 2025



New KDPW Group services planned in 2025



dates

Expansion of KDPW_CCP clearing services for BondSpot transactions

Żaneta Skorupska-Świrska

Expansion of the scope of transactions concluded on TBSP cleared by KDPW_CCP. Introduction of new functionalities dedicated to overnight and repo RFQ transactions (requests for quotes to Market Makers only), including the operation of the RTGS system as an alternative system for the settlement of instructions sent to KDPW by KDPW_CCP and the development of a mechanism to suspend the sending of settlement orders to KDPW for overnight and repo RFQ transactions with T+0 settlement.

•	Distribution of materials describing the settlement process	Q1 2025
•	Meeting with Bondspot and participants trading on TBSP, and	
•	Opening of the test environment (TST KDPW_CCP), start of testing with BondSpot,	Q2 2025
	KDPW_CCP participants and KDPW participants	
•	Roll-out of the service in the production environment	Q2 2025

New KDPW Group services planned in 2025



Launch of compression for blended rate derivatives with no significant change in OTC portfolio risk

Żaneta Skorupska-Świrska

New kdpw_stream mechanism for participants clearing OTC derivatives to compress blended rate derivatives: a tool to improve the efficiency of OTC derivatives portfolio risk management.

Distribution of detailed materials describing blended rate derivatives compression

Meeting with OTC participants, and

 Opening of the test environment (TST KDPW_CCP) and start of testing with OTC participants and the MW confirmation platform

 Roll-out of the compression service in the production environment

dates

Q1/Q2 2025

Q2 2025

Q3 2025

New challenges for KDPW Group



ISO 20022 settlement messages

With a view to the adopted strategic directions, our long-term goal in the standardisation of communication is to harmonise the use of settlement messages to a standard based on ISO 20022.

We plan to move away from the use of MTxxx messages (compliant with ISO 15022) in the area of settlement in 2027 and will then require the use of ISO 20022-compliant messages in place of the current proprietary messages.

We will communicate details of our plans in this area in H2 2025.

New challenges for KDPW Group



Shortening the settlement cycle from T+2 to T+1

In view of discussions at EU level regarding the transition to a shorter settlement cycle (T+1), the KDPW Group expects that decisions in this regard will be taken after consultation with all European capital market participants.

What is essential is the ability of all market participants to adapt to the new T+1 settlement cycle, including expensive investments in advanced process automation.

EU Member States support the transition to T+1.

The European Commission will propose changes by the end of 2025 aiming to implement the T+1 settlement cycle in 2027.

At the initiative of KDPW, work in this area will be carried out in the S&R PL NMPG working group.



Q&A



Thank you