Modifications to KDPW and KDPW_CCP IT systems in 2022

Meeting with participants

8 November 2021

Adaptation to the CSDR settlement discipline requirements (Phase 2)

03

Launch of the conditional transaction (repo) clearing service in the ATS market segment for organised trading

04 Introduction of add-ons

05

Integration of OTC clearing and risk management into kdpw_stream

06

Launch of new functionalities of the KDPW Group Data Portal

07

Activation of multi-factor authentication (MFA)

08

online.kdpw.pl portal - launch of new applications

09

Target Services, MyStandards, AmiSeco



1 February

23-24 April

22-23 October

Winter implementation window

 Implementation of settlement discipline functionalities (Phase 2): cash penalty system, changes to buy-in, hold-release)

Spring implementation window

- Launch of the clearing service for **repo** transactions on Treasury BondSpot Poland
- Implementation of addons securing liquidity and concentration risk and wrong-way risk

Autumn implementation window

Integration of OTC clearing and risk management into kdpw_stream

Adaptation to the of the CSDR settlement discipline requirements (Phase 2)

Krzysztof Ołdak, Żaneta Skorupska-Świrska







STATE OF PLAY - IMPLEMENTATION DEADLINE REQUIREMENTS

- RTS 2018/1229 original effective date (13 September 2020) officially postponed to 1 February 2021 (Regulation 2020/1212 of 8 May 2020) and subsequently postponed to 1 February 2022 (Regulation 2021/70 of 23 October 2021)
- Cash penalties for late settlement implementation on 1 February 2022

Note: ESMA's recommendation to delay the implementation of the regulations on the mandatory use of buy-in, published on 23 October 2021.

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IMPLEMENTATION AT KDPW - PHASES

- The 2020 arrangements for implementation in two phases:
 - Phase 1 modifications/adjustments to some of the functionalities supporting settlement,
 - Phase 2 all remaining functionalities, mainly implementation of a new system for calculating cash penalties for late settlement and changes to the hold-release mechanism.
- Phase 1 (19 April 2021 spring implementation window) included modifications to the following functionalities:
 - Tolerance level
 - Cancellation of settlement orders
 - Partial settlement
 - Populating the "Place of clearing" field in settlement orders







PHASE 2 - FEBRUARY 2022

Scope of implementation:

- Cash penalty system mechanisms
- Modifications to the hold-release mechanism
- Handling of buy-in operations
- Modifications to the processing of post-trade settlement instructions

Implementation date according to the RTS - 1 February 2022

Start of external testing - 25 October 2021







NEW SYSTEM OF CASH PENALTIES - BASIC PRINCIPLES (1)

Cash penalties charged for late settlement due to:

- No assets on the participant's account on the expected settlement date
- Hold status (suspension of settlement)
- Entry of instructions after the expected settlement date

Instructions subject to penalties:

- Matched, pending settlement
- Irrespective of the type of market concerned, including OTC
- DvP and FoP

Exceptions:

- Operations not related to change of ownership
- Corporate action instructions
- Technical instructions







NEW SYSTEM OF CASH PENALTIES - BASIC PRINCIPLES (2)

Instruments subject to cash penalties:

- Admitted to trading on a regulated market or trading venue or
- Covered by CCP clearing

The amount of the penalty depends on the value of securities calculated according to "common" rules

Penalty rates as defined in RTS 2017/389

Currency of the fines calculated in KDPW - PLN or EUR

Transactions involving a CCP as central counterparty:

- Reporting to KDPW participants
- Collection and redistribution of penalties by CCPs in relations with clearing members.



NEW SYSTEM OF CASH PENALTIES - REPORTING AND COLLECTION/REDISTRIBUTION OF CASH PENALTIES

- KDPW provides ISO 20022 reports to participants
- Daily and monthly reports semt.044.001.01

Daily reports:

- Separate for new penalties and modifications
- Generation of a "no activity" report indicating the absence of penalties
- Analytical details
- Dispatch after the completion of the penalty charging process by 12.00 noon the following day at the latest

Monthly reports:

- Transmitted after the end of the calendar month on the 14th business day
- Aggregated data

Collection and redistribution of cash penalties:

- Payments in global net amounts
- Execution on the 17th working day, 11.00 a.m.
- Model based on PFOD (payment free of delivery) instructions
- Payments made in SORBNET2 (for PLN) or Target2 (for EUR)
- KDPW initiates penalty collection and redistribution orders with the clearing bank.







NEW SYSTEM OF CASH PENALTIES - CHANGES TO THE KDPW TABLE OF FEES

Cash penalties for late settlement shall not be a source of revenue for the CSD

Current fee for causing settlement to be suspended (point 8.1 of the Table of Fees) - deleted

New fees in the cash penalty mechanism – pending approval:

- Monthly fee
- Charged separately for each type of activity of the participant
- Charged in full irrespective of the duration of the participation agreement in a given month.
- Fee rates depending on the type of activity of the participant:
 - Brokerage and custody activities fee PLN 800/month
 - Other activities fee 250 PLN / month







MODIFICATIONS TO THE HOLD-RELEASE MECHANISM

- Extension of the possibility to switch from "release" to "hold" status also within the batch system currently this is only possible within the RTGS system
- Instructions already partially settled can be put on "hold" as a result of partial settlement.
- We are not planning to implement a solution allowing to put on "hold" a part of the volume specified in the settlement order (partial hold)
- Use of hold-release for the buy-in procedure:
 - instructions subject to matching the hold-release mechanism may be used by either settlement counterparty (current model)
 - instructions provided by a CCP (guaranteed) the hold-release mechanism may only be used by the CCP which has issued the instruction
 - instructions not subject to matching for non-guaranteed transactions (e.g. block trades) the hold-release mechanism may be used by either settlement counterparty







BUY-IN MECHANISMS

- KDPW will offer mechanisms which will enable participants to execute/settle buy-in operations and allow for appropriate management of settlement instructions whose late settlement has triggered the buy-in process:
 - hold-release mechanism
 - settlement instructions cancellation mechanism
 - partial settlement, including the use of the mechanism to modify the consent to partial settlement in the settlement instruction
 - a new code designation for buy-in transactions concluded outside organised trading is to be offered: operation code TRAD, trading mode BISO, instructions subject to matching
- Reporting of buy-in transactions compliant with ISO 20022;
- messages sese.041.001.01 and sese.042.001.01







MODIFICATIONS TO THE PROCESSING OF POST-TRADE SETTLEMENT INSTRUCTIONS

- Result of past discussions aimed at improving the processing of instructions presented by participants' clients limitation of the use of the code associated with post-trade settlement in settlement instructions (market code XPXX in the KDPW system)
- Implementation of a 'neutral' solution:
 - it will still be possible to indicate the market code KDPW/XPXX for operations with the TRAD code
 - the indication of this particular market code will be handled individually from the perspective of the matching process:
 - consistent indication by both counterparties matching of instructions
 - different indication of the market code by both counterparties no matching
 - indication by one counterparty and no indication by the other counterparty matching of instructions
 - the resulting evidence arising after the matching of participants' instructions will no longer be identified in the KDPW system as post-trade settlement the market code KDPW/XPXX will not be ,copied'
 - current post-trade settlement will be interpreted in the KDPW system as operations outside the trading venue and, as a result, will be subject to settlement on the same days as the settlement of OTC transactions.



FUNCTIONALITIES UNDER IMPLEMENTATION IN KDPW_CCP:

- cash penalties for late settlement module collection and redistribution of calculated amounts to the counterparties of KDPW_CCP (orders with code 644 in Sorbnet2/Target2);
- implementation of rules for the valuation of securities for the purpose of the cash penalty mechanism (rules common to the KDPW Group);
- mechanisms for monitoring participants as regards settlement timeliness;
- supporting the buy-in of securities the auction module and the cash compensation scheme (orders with code 645 in Sorbnet2/Target2);
- CSDR-compliant modifications to the hold-release mechanism suspension and cancellation of settlement of instructions causing settlement fails, issued by KDPW_CCP;
- providing KDPW_CCP clearing members with information on the buy-in procedure by KDPW_CCP (extension of ISO20022 messages).





Provision of information on the buy-in procedure by KDPW_CCP to KDPW_CCP clearing members (ISO20022 messages):

- secl.007.001.02 notification that KDPW_CCP has initiated the procedure, instructions causing settlement fails go to HOLD;
- secl.009.001.02 information on the status of the procedure, execution of buy-in, refund of the price difference, amount of cash compensation, together with the deadline for payment;
- other messages remain unchanged;
- ISO20022 message structures from the collection used by KDPW_CCP are posted on the MyStandards platform (available after logging in).

Tests with KDPW_CCP participants:

- possible implementation of the test scenarios, contact us at ccp@kdpw.pl
- optimal solution all KDPW_CCP clearing members will participate in the tests: settlement fails above 4 days, notification of the buy-in procedure, instructions on hold, auction, information on the implementation status of the buy-in procedure, handling of settlement, partial settlement, and sole compensation payment.



→	TIMELINE
10 June 2020 23 April 2021 9 July 2021 2 August 2021 29 September 2021	Details of the scope of the adjustments have been provided in information materials (letter DO/ZW/568/2020 of 10 June 2020, DO/ZW/688/2021 of 23 April 2021, DO/ZW/1229/2021 2 August 2021 and DO/ZW/1505/2021 of 29 September 2021, and CCP/ZW/486/2021 of 9 July 2021). In addition, the ISO 20022 message structures from the collection used by KDPW and KDPW_CCP are posted on the MyStandards platform
25 October 2021	Opening of the test environment and start of tests
December 2021/January 2022	Planned tests using production data

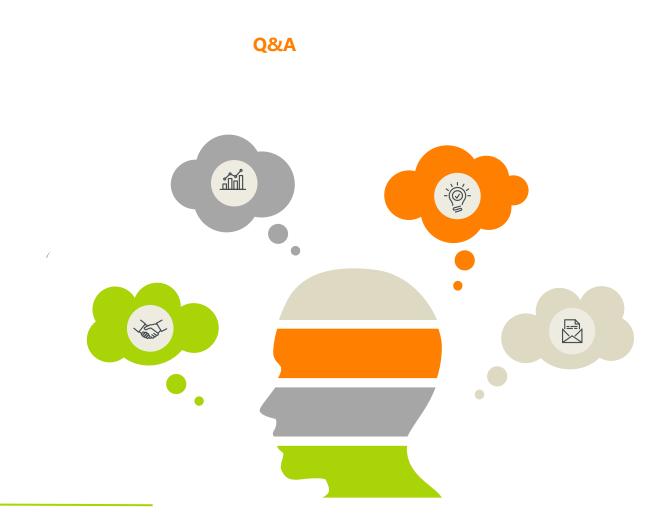
operations including buy-in auctions, hold-release

settlement discipline functionalities (Phase 2): cash penalty system, modifications to buy-in

roll-out

1 February 2022





Launch of a conditional transactions (repo) clearing service in the ATS market segment for organised trading

Marcin Truchanowicz





REPO TRANSACTION

- Classical repo Treasury securities (TS) admitted to trading on Treasury BondSpot Poland (TBSP), excluding index-linked bonds. The opening and the closing leg of a repo is for the same bond (same ISIN code).
- Repo transaction covered by the KDPW_CCP clearing guarantee system from the moment of its acceptance into the KDPW_CCP clearing system.
- TBSP presents both legs of repo transactions, i.e., the opening and the closing leg, on the day of concluding the transaction to be cleared in KDPW_CCP.
- Transactions are concluded on TBSP on an anonymous basis.



Settlement dates for opening and closing legs:

- ✓ settlement date of the opening leg: [T+0; T+2],
- ✓ settlement date of the closing leg (repurchase date): [T+1; T+365].
- The coupon is due on the payment date from the party buying the bonds in the opening leg and transferred via KDPW_CCP to the seller.





CLEARING OF TRANSACTIONS - general rules

- On each day when trades are executed, clearing positions are created based on the attributes of the clearing account, security, trade date, settlement date, market code, operation code.
- REPO, REVERSE-REPO and OUTRIGHT transactions have separate ISO settlement operation codes.
- Based on the clearing positions for all REPO, REVERSE-REPO and OUTRIGHT transactions, separate settlement instructions are issued to the KDPW on a gross basis.
- A hold period of a transaction in the clearing system (e.g. 30 minutes) before the instruction is transmitted to KDPW (MB).
- T+0 trade cut-off time: 2:50 p.m. Last possible time in view of the last MB settlement session and 30 minutes for trade cancellation.
- Transactions, clearing and settlement are handled by means of standard messages.
- KDPW CCP intermediates the reporting of repo transactions to KDPW TR (in accordance with the SFTR).





RISK MANAGEMENT IN KDPW_CCP - repo transaction risk hedging

Key risks:

- Bond price risk
 Initial margin and variation margin
- Repo rate risk
- Liquidity and concentration risk
 Liquidity and concentration risk add-on
- Coupon payment risk
 Variation margin

components of the margin requirement

Initial margin

Variation wariation wargin

Repo rate variation margin

LC add-on





RISK MANAGEMENT IN KDPW_CCP - guarantee fund

GPW BONDSPOT ATS
GUARANTEE FUND

GPW CATALYST

GPW NewConnect

BONDSPOT ATS

TBSP

BONDSPOT REPO

Main principles:

- minimum contribution depending on the market on which the participant operates (different contribution for a participant operating on GPW ATS, different for the TBSP segment);
- the fund value calculated on the basis of the exposure of the largest participant or the sum of the second and third largest exposures;
- the exposures of participants are determined at LEI level;
- participant's contribution proportional to the size of the participant's exposure;





HANDLING OF SETTLEMENT FAILS

Main principles:

- Handled in accordance with the CSDR settlement discipline;
- Start of the buy-in procedure after day S+7:
 - For the first leg, only if repo is longer than 30 days;
 - Repo of less than 30 days settled in cash on the settlement date of the second leg;
 - For the second leg, the buy-in procedure is carried out on a standard basis;
- How the buy-in procedure is implemented:
 - Auction via GUI;
 - Purchase order through a buy-in agent;
- The counterparty causing the settlement fail bears all costs related to the elimination of the settlement fail;
- Compensation paid to participants affected by a change of the original settlement date or cancellation of settlement;





COMMUNICATION

Key messages for repo transactions:

- KDPW CCP:
 - sese.sts.002.02 confirmation that the transaction has been accepted for clearing;
 - colr.mrg.001.04 details of margin payments (new version of the message);
 - colr.mrs.001.04 information regarding the status of the collateral transaction limit (new version of the message);
- KDPW:
 - sese.sts.001.05 settlement instruction status.



FEES

New point in the Table of Fees - Repo clearing fee

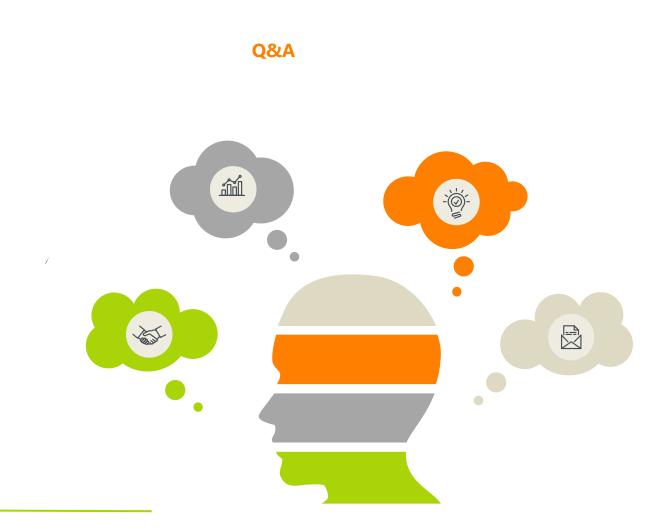
Maturity	Fee
1-2D	0.0005%
3-4D	0.0006%
5-7D	0.0007%
(1W;2W]	0.0010%
(2W;1M]	0.0015%
(1M;3M]	0.0020%
(3M;6M]	0.0040%
(6M;12M]	0.0080%



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	TIMELINE
9 July 2021	Detailed materials concerning the new service, including information on modifications to kdpw_stream system messages
2 January 2022	Opening of the test environment and start of tests
23-24 April 2022	roll-out clearing services for repo transactions concluded on Treasury BondSpot Poland, including repo auctions. The conditional transaction clearing service is planned to be launched as of 25 April 2022.













PURPOSE AND SCOPE OF THE MODIFICATIONS

Adaptation of the margining model to the requirements of EMIR and best market practice by introducing additional components of risk margin requirements calculated at the level of the clearing account:

- wrong-way risk add-on (WWR)
- liquidity and concentration risk add-on (LCR)

Current margin requirement in organised trading:

SPAN margin + MTM (cash transactions)

New margin requirement:

SPAN margin + MTM (cash transactions) + WWR add-on + LCR add-on







RISK TO BE HEDGED

WWR add-on

• It covers risks arising from exposures of a clearing member and its clients in own instruments which have a high correlation with the credit risk of that member

Positions generating WWR risk:

- positions in own shares and bonds of the clearing member and members of its group of companies,
- positions in futures on own shares of the clearing member and members of its group of companies,
- positions in options on own shares of the clearing member and members of its group of companies.







RISK TO BE HEDGED

LCR add-on

It covers the risk related to the size of a member's position in a given instrument and the possibility of its closing by KDPW_CCP on the market under conditions of:

- observed liquidity of the instrument,
- observed bid/ask price spread.

Note: The expected increase in margins concerns primarily clearing members' large positions in less liquid instruments with lower trading volumes and wider bid/ask price spreads as well as highly concentrated positions.







SUPPORT FOR PARTICIPANTS

New functions of kdpw_stream messages (available for testing)

- corl.mrg.001.03 margins at the level of the market (regulated market or ATS), clearing member, individual account (NKK) and clearing account, broken down by cash and derivative markets and by individual risk components (SPAN® margin, marking to market, WWR add-on, LCR add-on)
- colr.mrs.001.03 current utilisation of the clearing member's transaction limit and margin requirements by market (regulated market or ATS), by clearing member and by individual account. The margin requirement per account will present all components of the margin requirement including WWR and LCR
- colr.mrl.001.03 one-time query on margin requirements for all accounts of a clearing member without the need to specify them
- colr.adn.001.01 message with parameters of the add-on calculation model,
- Clearing members may obtain sample results of add-on calculations in the production system.







SUPPORT FOR PARTICIPANTS

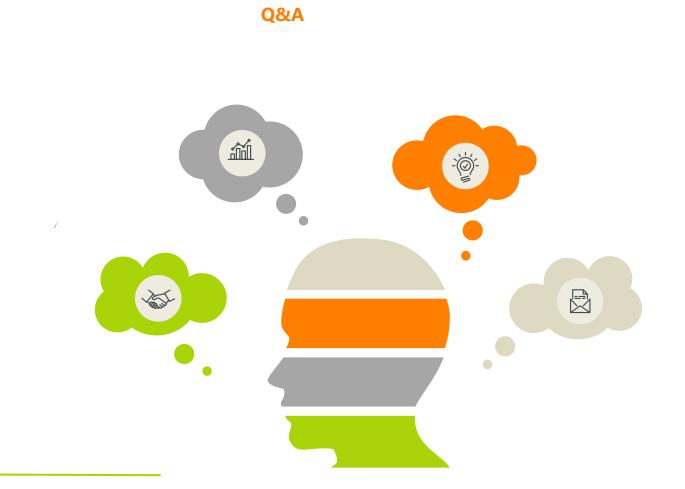
New functions of kdpw_stream messages (planned)

- In relation to the changes concerning the launch of repo clearing, the messages corl.mrg.001.03 and colr.mrs.001.03 will be replaced by their new versions: colr.mrg.001.04 and colr.mrs.001.04, respectively
- The new versions of the messages will be available for testing in the second half of November.
- In addition to the InitlMrgn, MtM, LCMrgn, WWRMrgn fields currently used, the messages in the new version will include additional (optional) margin requirement components applicable only to repo transactions:
 - 1) WR (MtM) marking to market for repo transactions, which can be negative
 - 2) DZR (RpRtMrgn) repo rate margin.
- Members who do not clear repo transactions will not receive the above information.

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	\downarrow	TIMELINE
	9 September 2020 30 November 2020 26 February 2021 20 May 2021 20 July 2021	Provision of detailed materials on planned changes to the margining model in connection with the introduction of add-ons (letters: CCP/ZW/582/2020 of 9 September 2020, CCP/ZW/768/2020 of 30 November 2020, CCP/ZW/161/2021 of 26 February 2021, CCP/ZW/355/2021 of 20 May 2021 and CCP/ZW/498/2021 of 20 July 2021), including the structures of the new messages.
	2 November 2020	Opening of the test environment
	20 May 2021 November 2021	 Message colr.adn.001.01 can be received in the test environment Repo messages can be received in the test environment
	15 July 2021	Software containing the new message structures: colr.adn.001.01, colr.mrg.001.03 and colr.mrs.001.03 is available in the test environment.
	Q1 2022	Amendment of the Regulation on the procedure and conditions for investment firms, banks referred to in Article 70(2) of the Act
•	23-24 April 2022*	Roll-out add-ons to cover liquidity and concentration risk and wrong-way risk *The implementation of the new margining model is subject to KDPW_CCP obtaining the approval of PFSA and ESMA for a significant change of the risk management model (expected in Q4 2021)



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Integration of OTC transaction clearing and risk management into kdpw_stream Żaneta Skorupska-Świrska







BENEFITS OF IMPLEMENTING OTC CLEARING IN KDPW_STREAM:

- adaptation of messages to changes requested by OTC Participants;
- making OTC auctions available through the KDPW CCP GUI;
- extending the use of FpML messages (supported by Markit and LCH, among others);
- greater flexibility and lower costs of modifications to the system;

CHALLENGES:

- Implementation of Client Clearing by further KDPW_CCP clearing members (Client Clearing accounted for less than 0.1% of clearing value in 2021);
- Increased use of Client Clearing in transactions between banks and:
 - Polish financial institutions (mutual fund managers, insurers),
 - Polish non-financial counterparties,
 - foreign participants of the OTC derivatives market.
- Increased market share of Polish banks in the PLN OTC derivatives market through:
 - transactions with small Polish banks,
 - foreign non-financial institutions serviced by Polish banks which use Client Clearing.



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CHANGES IN COMMUNICATION WITH KDPW_CCP CLEARING MEMBERS:

FpML messages:

- **FpML messages** transmission of statuses of OTC transactions accepted for clearing, including confirmations of acceptance or rejection, transmission of transaction details;
- use of the FpML version 5.11 standard published in December 2019;

message colr.mrg.003.03:

• message showing payments in respect of margins and other components of OTC clearing (colr.mrg.003.03), in addition information provided in message E1 which will be discontinued with the implementation of the new structure of colr.mrg.003.03;





CHANGES IN COMMUNICATION WITH KDPW_CCP CLEARING MEMBERS, cont'd:

replacement of Z messages:

Changes related to the handling of on-request reports - replacement of Z messages with the following messages:

- otcc.cfl.001.01 Cash Flows Report,
- otcc.cpn.001.01 Coupons Fixing Report,
- otcc.npv.001.01 NPV per Leg Report,
- otcc.pmt.001.01 Payments Report,
- otcc.tra.001.01 All Trades Report,
- otcc.trn.001.01 New Trades Report,
- otcc.trs.001.01 Settled Trades Report,
- otcc.vtn.001.01 Daily Variation Report,
- otcc.rqs.001.01 Report Request;





CHANGES IN COMMUNICATION WITH KDPW_CCP CLEARING MEMBERS, cont'd:

changes to messages related to the handling of auctions:

Changes related to auction handling - FpML messages (FpML valuationReport: AuctionTradesOffered and

AuctionTradesAcquired) and new messages:

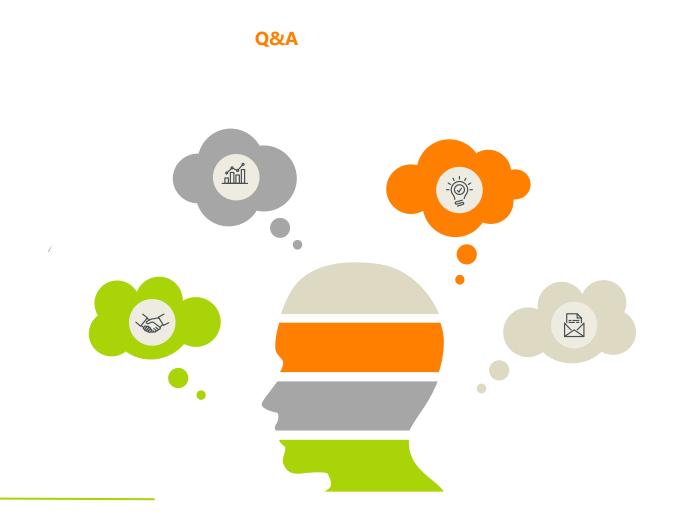
- auct.ntf.001.01 Auction announcement of auction conditions,
- auct.qtn.001.01 Auction transfer of quotes,
- auct.rqs.001.01 Auction initiation of auctions on demand,
- auct.stq.001.01 Auction quote status,
- auct.str.001.01 Auction status of request to start an auction,
- auct.oda.001.01 Auction acceptance of results of auctions on demand,
- auct.odr.001.01 Auction results of auctions on demand.



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	TIMELINE	
9 July 2021	Provision of details on the use of FpML messages in the clearing system for OTC derivatives and information on modifications to system messages (letter CCP/ZW/487/2021 dated 9 July 2021)	
1 April 2022	Opening of the test environment and start of tests	
1 July 2022	Start of tests for OTC auctions	
22-23 October 2022	Roll-out upgraded clearing system for OTC transactions	









06 Launch of new functionalities of the KDPW Group Data Portal Slawomir Zając







- Replacement of the current statistical data presentation service with a product of higher quality and new functionalities,
- Technological progress. The current SPDS has been in operation since 2009 on a technologically outdated infrastructure which is difficult to maintain (no support from the infrastructure vendor),
- Improved availability, technical reliability, and data quality
- KDPW taps the potential of available data on a par with other central securities depositories,
- Regulating how and to what extent reference and statistical data are used by external users:
 - Terms and conditions of the data sales service,
 - Rules for the use of free data

Note: The existing kdpw_stream statistics service will close on 10 January 2022







BENEFITS TO THE MARKET

- Access to data available through modern and standardised mechanisms,
- Two data distribution channels:
 - manual forms with the possibility of exporting to JSON, XLS and XML format,
 - API developed in accordance with the OpenAPI version 3.0.3 standard.
- Access to current reference data,
- Flexible management of access to data in your organisation remotely via the Data Portal,
- Ongoing expert support for customers of the paid service,
- Harmonisation of rules for data download and distribution.







DATA PORTAL - DATA ACCESS MODES

Data from the data portal data.kdpw.pl will be available at three levels:

paid - for registered users

free of charge - for logged in users

- reference data and statistical information on the activities of KDPW CSD and KDPW_CCP included in the free-of-charge package,
- RGI application,
- reports on the number of accounts maintained by entities authorised to maintain securities accounts,

free of charge - no need to log in (open channel)

- RZE.INFO,
- EMIR TR aggregated weekly statistics ,
- SFTR TR aggregated weekly statistics.



	TIMELINE
1 March 2021	Launch of the KDPW Group Data Portal (https://data.kdpw.pl) - free data
1 September 2021	Opening of the test environment and start of tests (paid service functionalities)
08 November 2021	Publication the price list of the paid service
22 November 2021	Provision of reports covering the full range of information of the paid service with the option to manually download data in a file (until 31 December 2021 - free of charge in the free service)
31 December 2021	Roll-out functionalities allowing the purchase of data, with the option of downloading data in a file (preceded by the publication of the Terms of Service)
until 31 December 2021	Publication of the detailed terms and conditions for the provision of the data sales service via the API.
31 March 2022	Roll-out functionalities allowing access to paid data via API.







Note: Full scope of information in reports is available on the Data Portal website: https://data.kdpw.pl/p/structures

Scope of information in the paid service:

- Report 1. Financial instruments registered in KDPW_CCP,
- Report 2. Financial instruments registered or coded in KDPW,
- Report 3. Counterparties and their data, i.e.: LEI, NIP, REGON,
- Report 4. Financial instruments accepted in/excluded from KDPW,
- Report 5. Capitalisation of financial instruments registered on accounts of KDPW participants (by type of participant),
- Report 6. KDPW participants and issuers,
- Report 7. Corporate actions/acquisitions of financial instruments registered with KDPW.









Scope of information in Report 1 Financial instruments registered in KDPW_CCP:

- List of ISIN codes of derivatives registered in KDPW_CCP together with CFI and FISN codes.
- Characteristics of derivatives.
- Number of open positions.
- Market value of instruments.
- Information about the listing market.
- Number and value of cleared transactions.



Note: As of 31 March 2022, the report will be extended to include cash market instruments.







Scope of information in Report 2 Financial instruments registered or coded in KDPW:

- List of ISIN codes registered with KDPW together with CFI and FISN codes.
- Characteristics of financial instruments (expiry date, year of issue, category of instrument).
- Issue size and nominal value of instruments.
- Identification of the issuer (institution code, LEI).
- Market value of instruments.
- Valuation of financial instruments.
- Information about the listing market.
- Number and value of cleared transactions by ISIN code.







Scope of information in Report 3 Counterparties of the KDPW Group and their data, i.e.: LEI, NIP, REGON:

- LEI code.
- LEI code registration status.
- Full name of the entity.
- NIP.
- RFGON.
- Legal form.
- Business register type.
- ID of the entity in the business register.



Note: As of the launch of the paid service, the report will not include data of natural persons conducting business activity. The report will be gradually supplemented as we obtain the consent from such entities.







Scope of information in Report 4 Financial instruments accepted in/excluded from KDPW:

- ISIN code.
- Type of event:
 - Registration,
 - Deregistration.
- Date of event.
- Number of financial instruments.
- Issue designation series.
- Issue price.



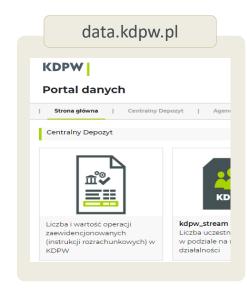




Scope of information in Report 5 Capitalisation of financial instruments registered in accounts of KDPW participants (by type of participant):

- Date.
- Type of participation.
- Instrument category.
- Capitalisation.







Scope of information in Report 6 KDPW CSD Participants and Issuers:

- Institution code.
- LEI code.
- Full name of participant/issuer.
- Type of participation.
- Date of acceptance into KDPW.







Scope of information in Report 7 Corporate actions / acquisitions of financial instruments:

- Type of corporate action.
- ISIN of acquirer security.
- ISIN of acquiree security.
- Category of acquirer/acquiree instrument.
- Issuer institution code.
- Full name of the issuer.
- Record date.
- Date of event/buy-out.
- Event value / event conditions (e.g. 1:5 takeover).







FEES

- Customers will order paid subscriptions and select the scope of access and data packages.
- A data package consists of one or more reports.
- KDPW will determine the number of packages made available and the assignment of reports to packages.
- At the time of launch of the service, we plan to assign reports to packages as follows:

Package	Reports
Package I. CCP instruments:	Report 1.
Package II. CSD instruments:	Report 2.
Package III. Entities and institutions:	Report 3, Report 6.
Package IV. CSD data:	Report 4, Report 5, Report 7.

Note: As of 31 March 2022, we are planning to add Report 8 with a global database of LEI codes. Report 8 will be added to Package 3.





FEES cont'd.

Fee per package

Fee	Monthly	Annual
for 1 package	400 PLN	2 400 PLN

Fixed discounts in case of purchase of:

- two packages: 10% discount for each package,
- three packages: 20% discount for each package,
- four or more packages: 30% discount for each package.

Fees for access

Fee	Monthly	Annual
up to 3 users	100 PLN	600 PLN
up to 6 users	300 PLN	1800 PLN
up to 50 users	600 PLN	3 600 PLN
API*	N/A	12 000 PLN

Note: * API will be launched on 31 March 2022.





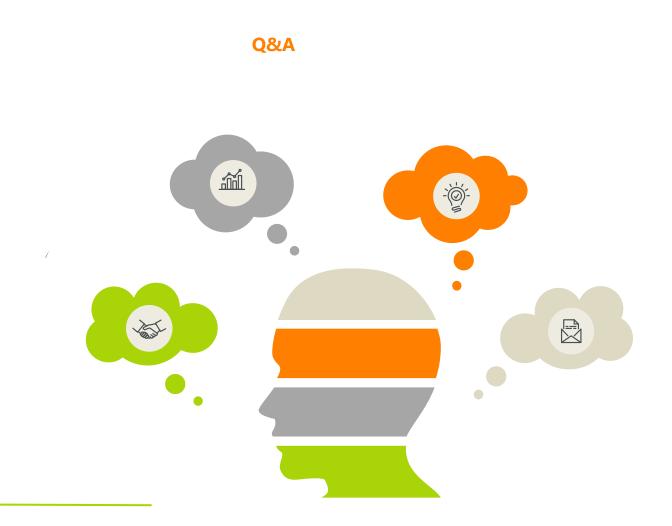


API FOR ENTITIES INTERESTED IN PROCESS AUTOMATION

- Detailed API documentation will be published in the Data Portal by 31 December 2021,
- API will be made available in production on 31 March 2022,
- We have made available nearly twenty API views in the test environment which allow you to download data from 7 reports prepared for you,
- API access will be available for purchase when ordering the subscription or during the subscription period,
- Purchased API access allows you to download all data requested in your subscription,
- API technical details are available at: https://tst-data.kdpw.pl/developers/

Note: The existing kdpw_stream statistics service will close on 10 January 2022



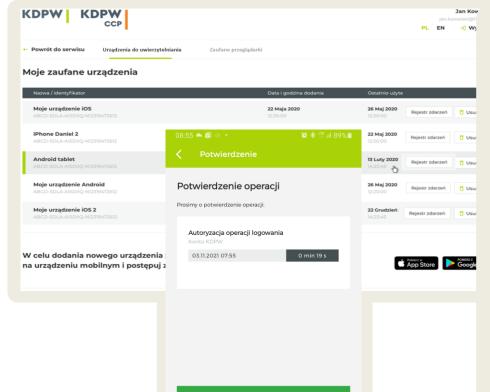


07 Activation of multi-factor authentication (MFA) Ludwik Rytter KDPW | KDPW | CCP

Activation of multi-factor authentication (MFA)







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- increase of security threats to IT systems available online,
- increasing numbers of services that the KDPW Group offers via the Internet,
- as your security is our priority, taking into account the results of the risk analysis carried out in accordance with the Guidelines of the Polish Financial Supervision Authority concerning the management of information technology and information and communication environment security in market infrastructure entities, we plan to introduce an additional authentication mechanism securing access to KDPW Group applications as of 1 April 2022.
- as an additional mechanism required when logging in to selected online resources of the KDPW Group, apart from the currently required pair of attributes (login and password), we will require the confirmation of the login operation using the KDPW Group Authenticator mobile application,
- the KDPW Group Authenticator application will be available for free download from authorised stores: Google Play for Android and App Store for iOS,
- you will need to pair the downloaded application with each of your accounts (online.kdpw.pl),
- we are planning to implement the possibility of adding trusted browsers, which will facilitate the login process for users who regularly use the services of the KDPW Group.



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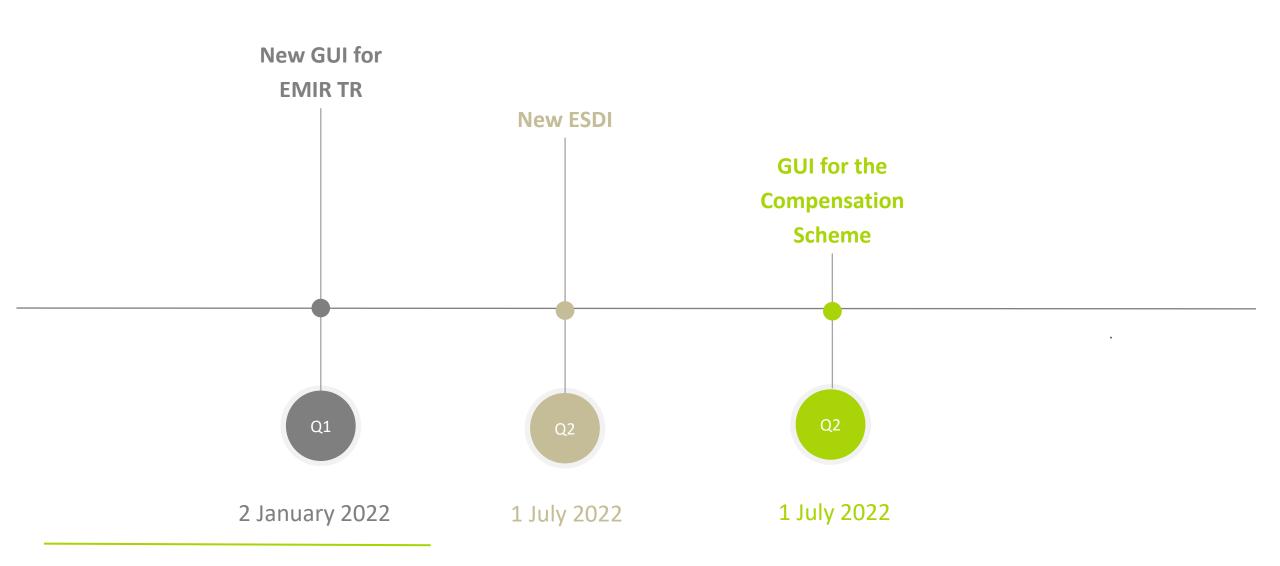
	TIMELINE	
from December 2021 to March 2022	Opening of the test environment and start of tests	
1 April 2022	Roll-out additional authentication mechanism using the KDPW Group Authenticator mobile application. As of the roll-out date of the mechanism, the identity of users using selected electronic services of the KDPW Group will be verified using two security components.	





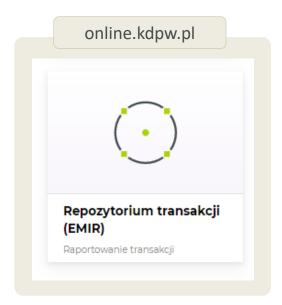
08 online.kdpw.pl portal - launch of new applications Ludwik Rytter KDPW KDPW CCP

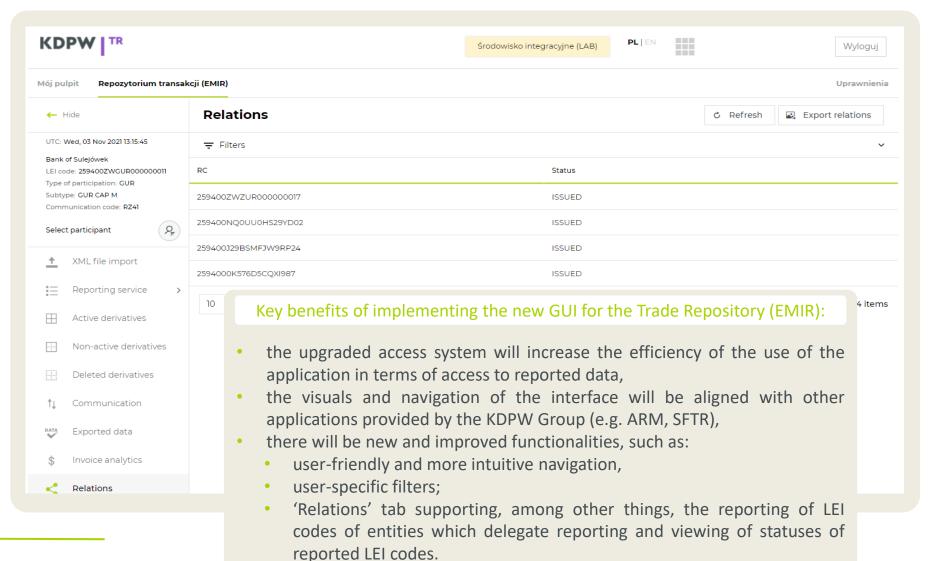




online.kdpw.pl portal - new GUI for Trade Repository (EMIR)









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	TIMELINE
22 November 2021	Opening of the TSTB test environment and start of tests
22 November - 16 December 2021	Tests with EMIR TR participants
2 January 2022	Roll-out online.kdpw.pl - new version of the application, including in particular a new GUI (user interface) for the production (PRD) and educational (EDU) environment





online.kdpw.pl



Participants of the compensation scheme will gain access to a new application operating on the online.kdpw.pl services portal, which is a user-friendly tool for exchanging data with KDPW in the compensation scheme. Alongside SWI, the solution will be an alternative way for participants to submit required data to the compensation scheme.

The GUI for the Compensation Scheme will support:

- Transmission of data by participants to the compensation scheme, e.g. average asset value, number of investors,
- Review and download of information on operations increasing and decreasing participants' contributions to the compensation scheme, e.g. excess contributions, earned income, deducted costs and fees, compensation payments,
- Reading of notifications of upcoming deadlines for the fulfilment of obligations resulting from participation in the compensation scheme,

Key benefits of implementing a GUI for the Compensation Scheme:

- shortening data flows,
- simplifying the way information is prepared and communicated.

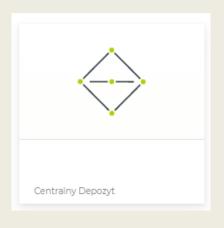


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		TIMELINE	
	31 May 2022	Distribution of user manuals to participants of the Compensation Scheme Opening of the test environment and start of tests	
	1 July 2022	Roll-out online.kdpw.pl - GUI for participants of the Compensation Scheme	

online.kdpw.pl portal - launch of new applications replacing ESDI



online.kdpw.pl







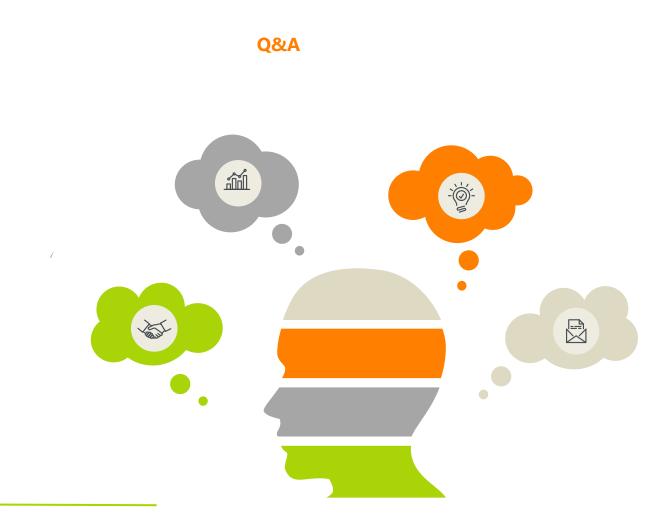
In the upgrade of the ESDI/WEB system for the exchange of system messages and communications, the functions performed in the current ESDI/WEB will be replaced by separate applications:

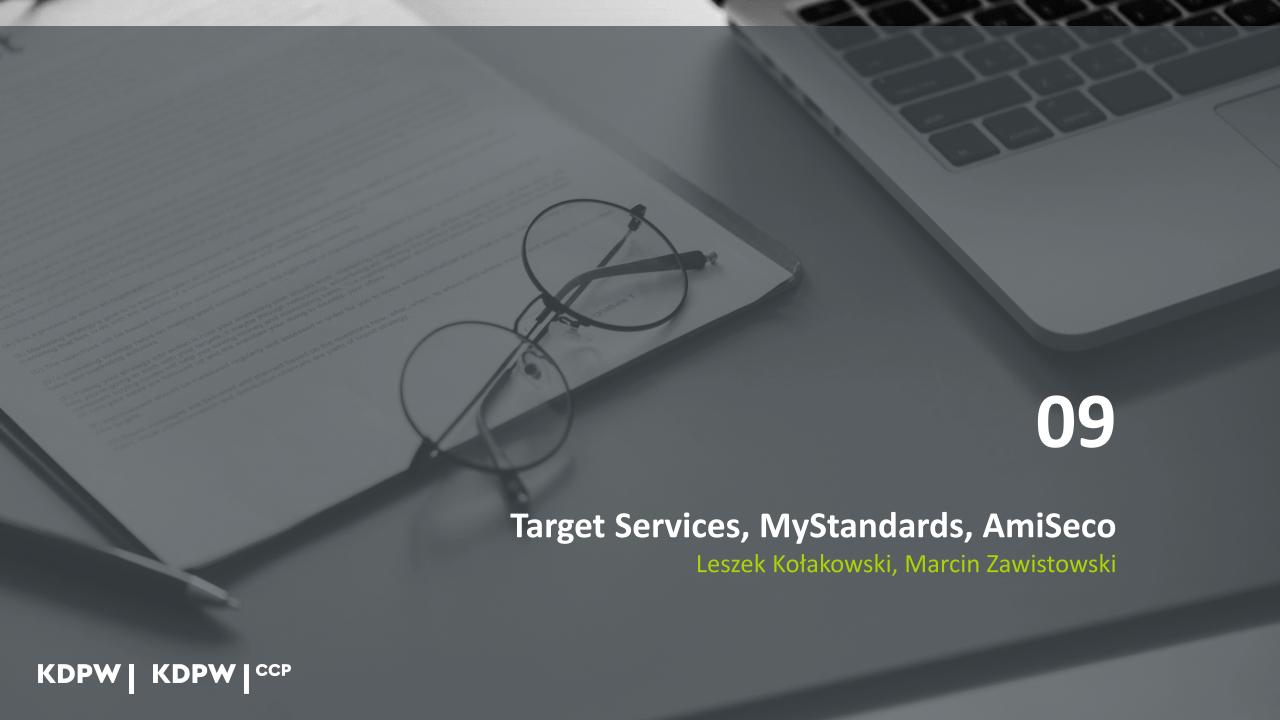
- aggregating all functions related to the distribution of communications between KDPW and and KDPW Participants and separately between KDPW_CCP and KDPW_CCP Participants,
- enabling transmission of XML system messages in the U2A model, separately for KDPW and KDPW_CCP with respect to access to relevant parts of kdpw_stream.



	TIMELINE	
February 2022	Distribution of detailed information on changes to ESDI	
March 2022	Opening of the test environment and start of tests	
1 July 2022	Roll-out online.kdpw.pl - new applications replacing the existing ESDI system	

















Target Services

In November 2022, the pan-European interbank EUR clearing system **Target2** operated by the Eurosystem will be replaced by **T2**, which will become a part of the **Target Services** package.

Target Services is the collective name for Eurosystem market infrastructure services: T2 (RTGS and CLM), Target2 Securities (T2S) and Target Instant Payment Settlement (TIPS).

The project is also known as **T2-T2S Consolidation**.

The project is conducted by the Eurosystem (ECB and the central banks of the euro area); on the Polish market, it is coordinated by the **NBP**.

KDPW and KDPW_CCP participate in T2 as **ancillary systems**.





	TIMELINE	
December 2021 - September 2022	T2 user testing	
Q1-3 2022	Tests with participants of KDPW and KDPW_CCP In addition to a set of mandatory tests required by the ECB and NBP, KDPW and KDPW_CCP are planning tests with participants, in particular payment agents, to verify the EUR settlement process in KDPW and KDPW_CCP	
21 November 2022	Roll-out of the new T2 system	





MyStandards

- Used for publication by more than **130** financial institutions
- More than 53,000 registered end users
- Used by the KDPW Group since March 2017 for documentation of ISO15022 and ISO20022 messages (as NMPG PL since 2014)

Basic access to the MyStandards platform is free of charge and requires only standard registration, typical for online services (the system is available at: http://mystandards.swift.com). The homepage of the KDPW Group on the MyStandards platform is available at:

https://www2.swift.com/mystandards/#/group/KDPW_Group

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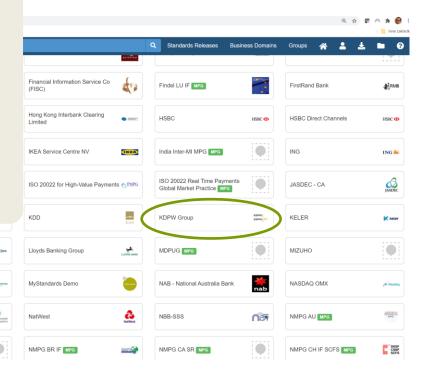
National Bank of Ukraine Payments

Monte Titoli

Monetary Authority of Singapore

National Bank of Romania

NMPG AU NZ IF MPG





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		TIMELINE	
	1 January 2023	Migration of system message documentation for all business lines of the KDPW Group to the <i>MyStandards</i> platform	



In communicating with counterparties, the KDPW Group uses:

- ~ **200** proprietary XML message types
- ~ 50 ISO20022 message types

There is a need for a unified and modern method for the management and publication of system message specifications







AmiSeco

Implementation of the standards developed by AMI-SeCo for corporate action and billing processes as part of the process of harmonising collateral management rules for the European market (Single Collateral Management Rulebook for Europe - SCoRE).

The project is expected to further develop the existing software in the following areas:

- electronic messages used for the handling of typical corporate actions for debt instruments (in the case of an extension of standards, also equity instruments and funds),
- electronic messages used to exchange information related to billing for KDPW services,
- the interface offered by the KDPW for the processing of corporate actions (e.g. the "Payment of Benefits" application),
- standardisation of processes for the handling of corporate actions and billing.



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		TIMELINE		
	8 April 2021	Submission to AMI-SeCo of adaptation plans for the Corporate Actions and Billing Processes standards, as part of the Single Collateral Management Rulebook for Europe (SCoRE).		
	30 July 2021	Communication announcing project work aiming at aligning KDPW with AMI-SeCo standards		
	March 2022	Distribution of detailed materials on planned changes to KDPW IT systems related to alignment with AMI-SeCo standards		
	as of March 2023	Opening of the test environment and start of tests (in stages)		
	20 November 2023*	Roll-out AMI-SeCo standards for collateral management (Corporate Actions, Billing Processes standards)		

^{*}final implementation date may be subject to change, inter alia, in the event that the scope of the standards is extended to cover equity instruments and funds

