
Repos in KDPW_CCP

Clearing and Risk Management in Organised Trading

Warsaw, 10 December 2021



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- ✓ 8 April 2014 – KDPW_CCP is authorised by KNF under EMIR
- ✓ 9 August 2016 – authorisation is extended by KNF to include additional instruments

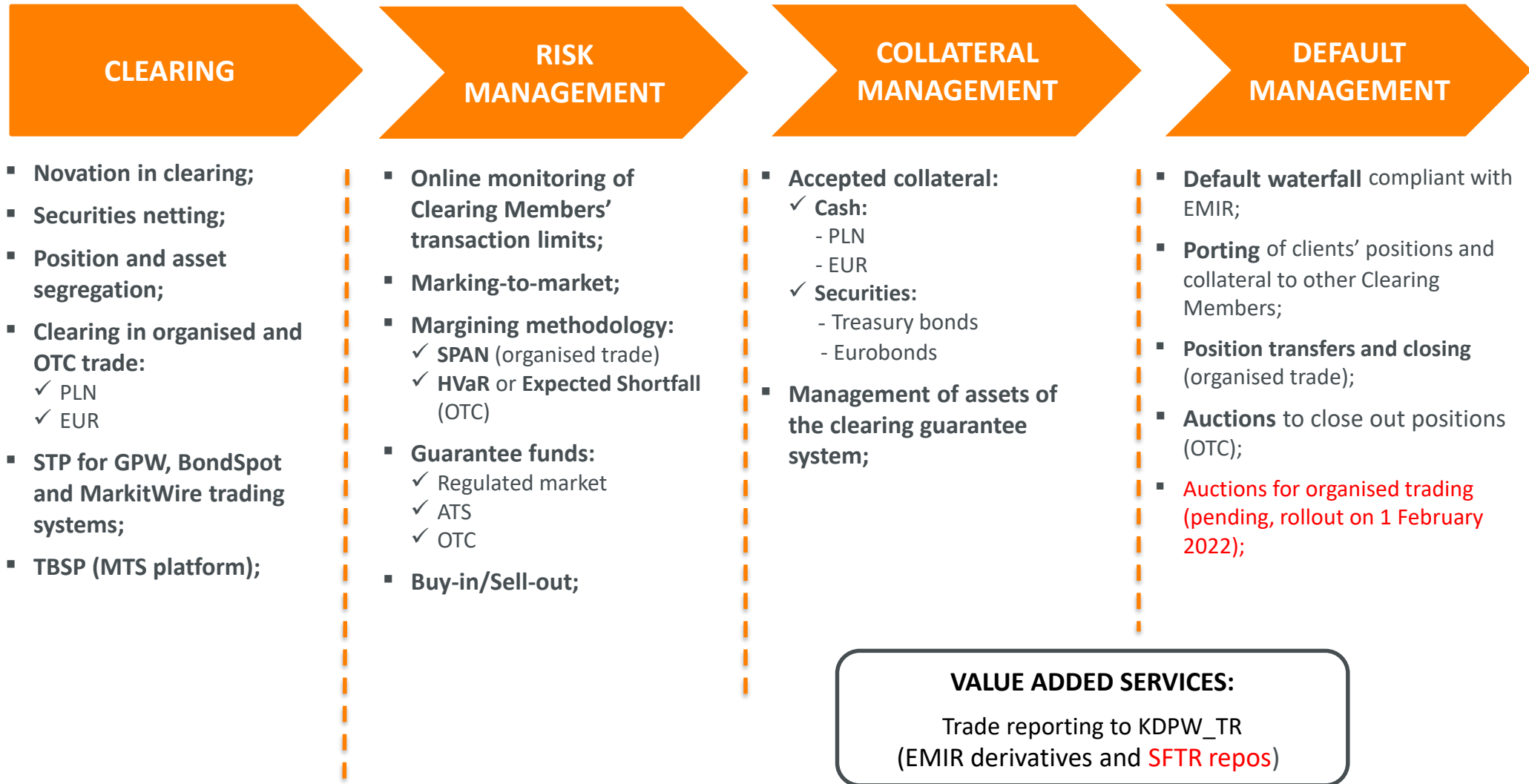
CLASSES OF FINANCIAL INSTRUMENTS

Organised trading

- PLN equity and debt;
- EUR equity and debt;
- index, interest rate, FX, equity and debt derivatives;
- **PLN bond repos (in partnership with TBSP, rollout on 25 April 2022);**

OTC trade

- PLN interest rate derivatives;
- EUR interest rate derivatives;
- PLN debt;
- PLN repos and sell/buy-back;



Classic repos – Treasury securities admitted to trading on Treasury BondSpot Poland (TBSP), other than index bonds. Repos are opened and closed in the same bond (same ISIN).

Repos are covered by the KDPW_CCP clearing guarantee system from the time of acceptance for clearing by KDPW_CCP.

TBSP presents both repo legs (opening leg and closing leg) for clearing in KDPW_CCP on the trade date.

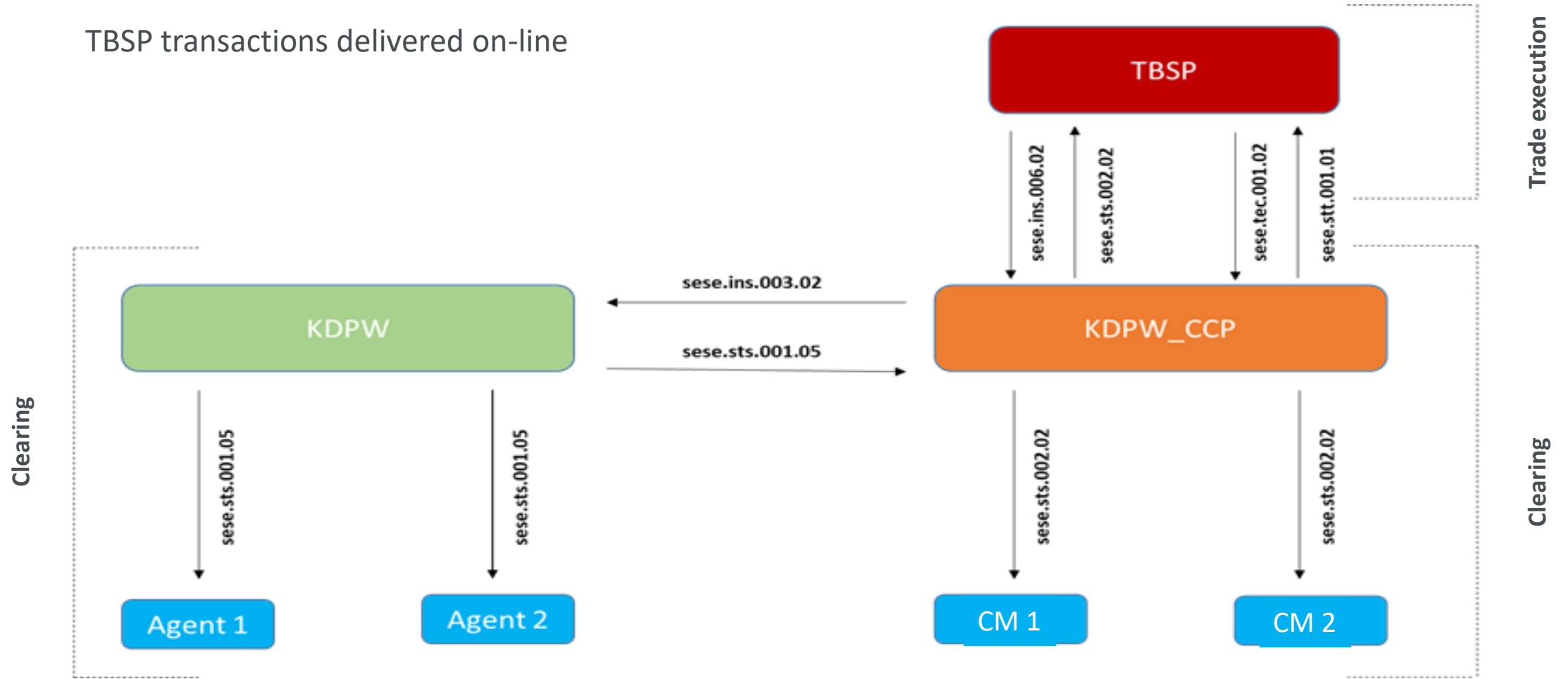
Repos concluded on TBSP are anonymous, KDPW_CCP becomes a counterparty after novation.



Settlement date of the opening leg and the closing leg:

- ✓ settlement date of the opening leg: [T+0; T+1; T+2],
- ✓ settlement date of the closing leg (repurchase date): [T+1; T+365].

TBSP transactions delivered on-line



GENERAL RULES

- On each day when trades are made, clearing positions are determined on the basis of attributes of clearing account, security, trade date, settlement date, market code, operation code.
- REPO, REVERSE-REPO and OUTRIGHT trades have different ISO settlement operation codes.
- Clearing positions for all REPO, REVERSE-REPO and OUTRIGHT trades are used to generate separate settlement instructions for KDPW on a gross basis.
- Transactions are on hold in the clearing system (30 minutes) before the instruction is transmitted to KDPW (MB system).
- The T+0 trade cut-off date is 14:15 hours, the latest time possible due to the last MB settlement session and 30 minutes available to cancel any trade.
- Trade, clearing and settlement supported by standard messages including ISO 20022.
- KDPW_CCP reports REPO trades to the KDPW TR (under SFTR).

REPO MESSAGES

FROM KDPW_CCP:

- sese.sts.002.02** – confirmation of acceptance of a trade for clearing;
- colr.mrg.001.04** – margin payment details (new message version);
- colr.mrs.001.04** – transaction limit status report (new message version);

FROM KDPW:

- sese.sts.001.05** – settlement instruction status

Settlement discipline (KDPW_CCP):

- secl.007.001.02** – buy-in initiation notification;
- secl.008.001.02** – deferral of the delivery end date;
- secl.009.001.02** – buy-in trades, buy-in cost reimbursement, compensation details;

KEY RISKS:

- Bond price risk

Initial margin and variation margin

- Repo rate risk

Repo rate variation margin

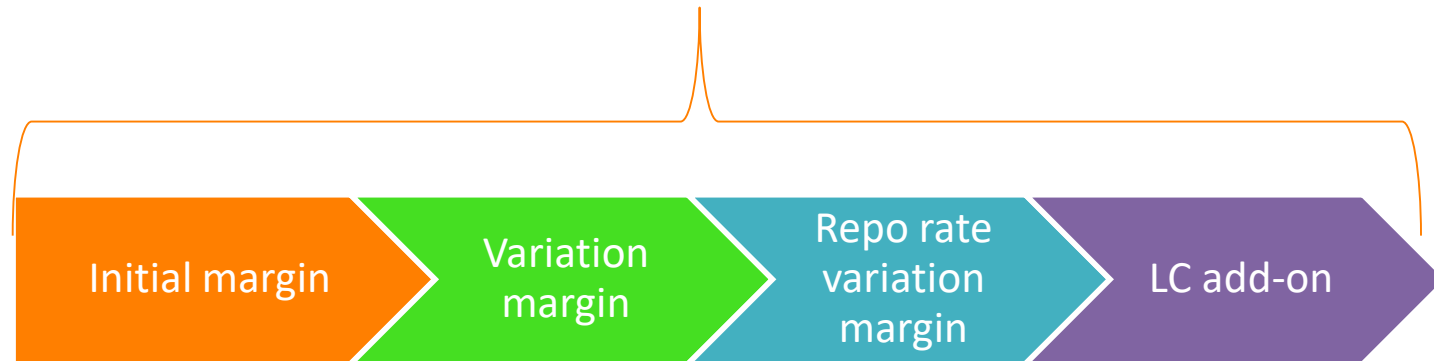
- Liquidity and concentration risk

Liquidity and concentration add-on

- Coupon payment risk

Variation margin

margin requirement components



IV. KDPW_CCP RISK MANAGEMENT – REPO RISK HEDGING

REPOS:

ISIN	PL0000102646	PL0000112728
NAME	WS0922	PS0425
REPO DATE	0/7	0/7
VOLUME (#)	100 000	100 000
NOTIONAL AMOUNT (N)	100 000 000.00	100 000 000.00
COUNTERPARTY	REPO	REPO
REPO RATE (RRm)	0.50%	0.50%
TRADE EXECUTION DATE	22.11.2021	22.11.2021
PRICE	102.88	92.38
INTEREST T+0	9.45	4.34
PURCHASE PRICE	1038.25	928.14
PURCHASE PRICE % (DPRm)	103.83%	92.81%
PURCHASE AMOUNT	103 825 000.00	92 814 000.00
MARGIN	247 508.72 PLN	1 541 999.57 PLN

TOTAL MARGIN PLN 1,789,508.29

IV. KDPW_CCP RISK MANAGEMENT – REPO RISK HEDGING

Bond price margin (SPAN margin)

NAME	DURATION CLASS	MOD DURATION	SPAN MARGIN
WS0922	DRPPL1	0,811	278 357.00
PS0425	DRPPL2	3,255	840 420.00
			1 118 777.00

Repo marking-to-market

NAME	SIGN	t2-t (in days)	df (discount factor)	BOND PRICE	BOND PRICE % (DP_MTM)	Market repo rate (RRt)	MARKING TO MARKET
WS0922	1	5	99.98%	1039.92	103.99%	1%	171 255.40
PS0425	1	5	99.98%	922.1	92.21%	1%	-600 148.41
							-428 893.01

Repo rate margin

NAME	Parameter p_rr	DZR
WS0922	0.73%	10 397.12
PS0425	0.73%	9 219.16
		19 616.28

Liquidity and concentration risk add-on (DLCR)

NAME	Average daily turnover value (OS)	New liquidation period (LPN)	Bid-ask spread	DLCR
WS0922	149 490 976.98	2	0.25%	129 990.00
PS0425	203 426 945.82	2	0.20%	92 210.00
				222 200.00

GPW BONDSPOT ATS
GUARANTEE FUND:

BONDSPOT ATS

BONDSPOT A2A

BONDSPOT REPO

GPW ATS

MAIN RULES:

- minimum contribution depending on the participant's market (different contributions from GPW ATS participants and TBSP – BondSpot ATS participants);
- fund size depending on the exposure to the biggest participant or the sum of the second and third biggest exposure;
- participant exposures calculated at LEI level (CM declaration re. U code);
- participant contribution in proportion to participant exposure;

KEY CLEARING FUNCTIONS

NOVATION – the contractual obligations between the original counterparties to the trade expire, CCP becomes the buyer for every seller and the seller for every buyer.

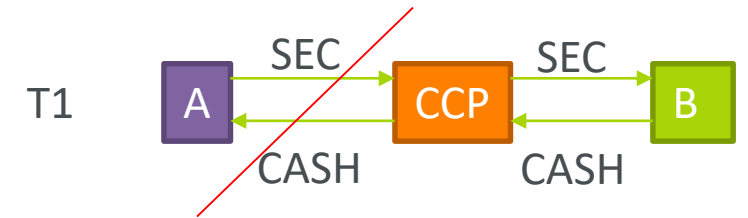
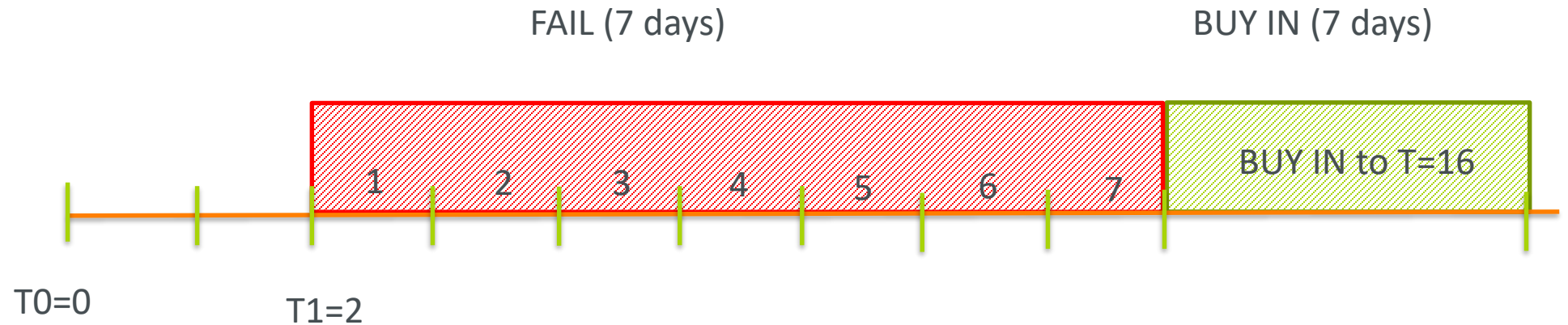
NETTING IN KDPW MULTIBATCHING – specificity of KDPW settlement sessions: delivery of a security sold by counterparty A to counterparty B via CCP may be netted with the delivery of the same security purchased on the same day by counterparty A from counterparty C via CCP, thus reducing counterparty A's exposure.

DvP settlement sessions: 10.30, 13.00, 15.30.

V. SETTLEMENT FAILS – MAIN RULES

- Handled according to CSDR settlement discipline;
- Buy-in procedure triggered after day S+7 (for the OPEN leg, only repos longer than 30 days, under CSDR):
 - Action in third-party GUI, no partial settlement
- Buy-in for the second leg according to standard rules;
- Seller's clearing instruction on hold in KDPW, settlement discipline details notified in secl. (ISO20022);
- Counterparty responsible for the settlement fail pays all related costs;
- Compensation paid to participants suffering a loss due to change of expected settlement date or cancellation of settlement (payment instruction code 645);
- Cash penalties charged by KDPW and redistributed by KDPW_CCP (payment instruction code 644);

V. SETTLEMENT FAILS (repos longer than 30 days)



T0 – repo trade on TBSP: A (REPO) vs B (REVERSE-REPO)

T1 – settlement date of the first leg – participant A is short of securities

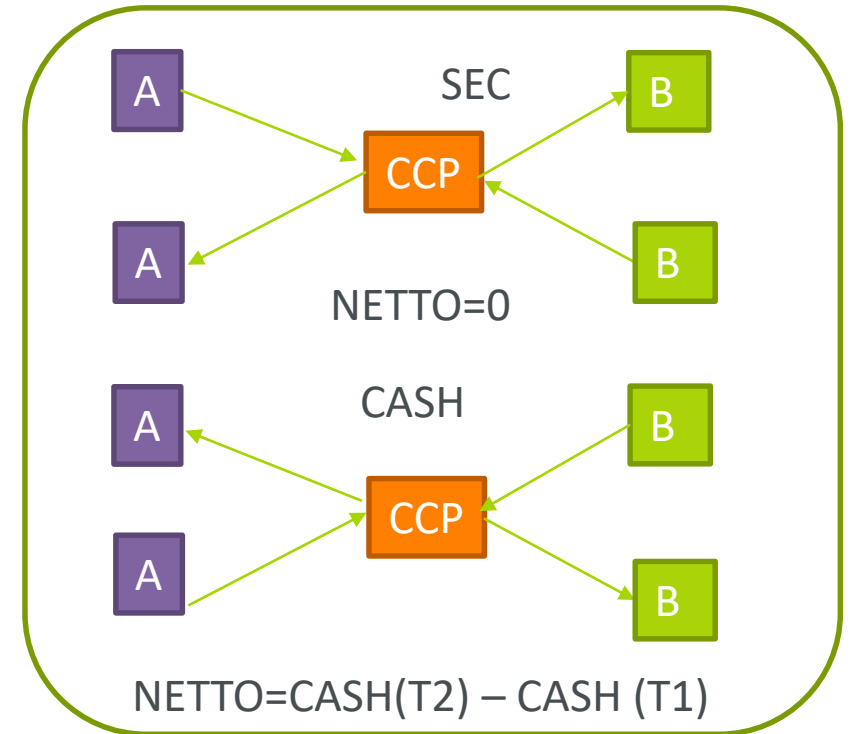
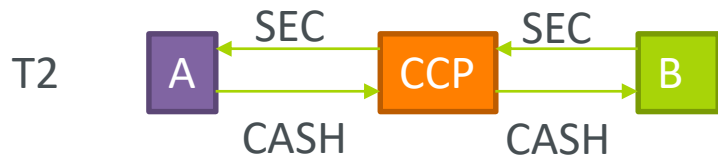
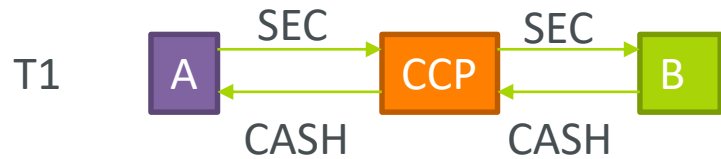
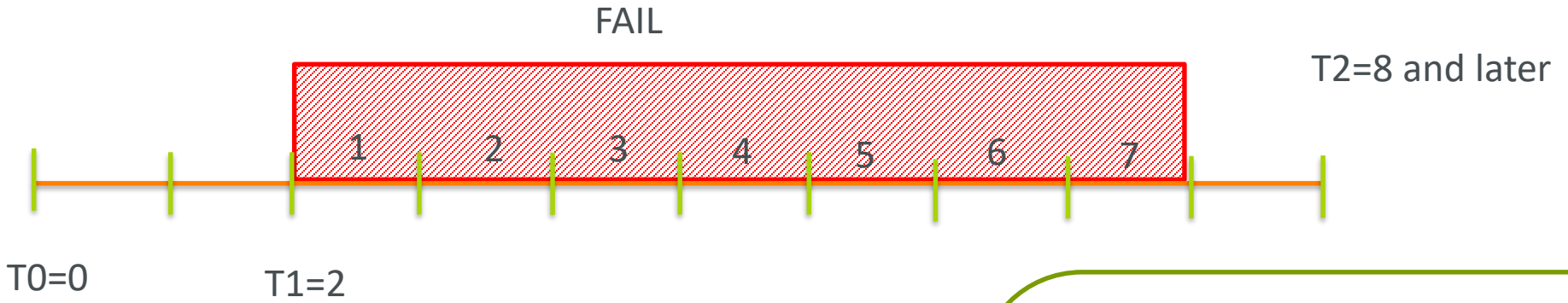
T=3 to T=9 – settlement fail, seller instruction on hold

From T=10 – buy-in paid by CCP, settlement of the first leg of repo

PENALTY FOR COUNTERPARTY RESPONSIBLE FOR SETTLEMENT FAIL, COMPENSATION FOR REVERSE REPO COUNTERPARTY

No buy-in until T=16 – repo can be shortened, trade close-out may be deferred

V. SETTLEMENT FAILS (repos no longer than 30 days, no buy-in)



T_2 – settlement of repo leg 1 and 2 – instructions are netted

PENALTY FOR COUNTERPARTY RESPONSIBLE FOR SETTLEMENT FAIL

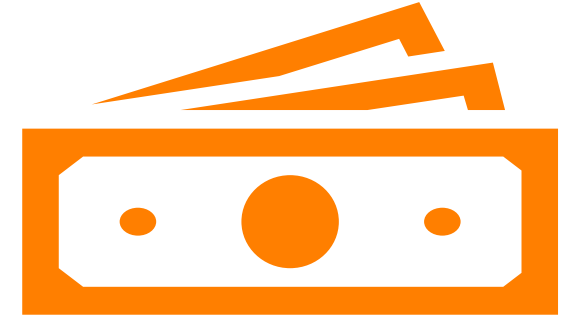
COMPENSATION FOR REVERSE REPO COUNTERPARTY – cash payment

KDPW T_2

VI. FEES

- Accepting trades for clearing:

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%



- Penalty for counterparty responsible for settlement fail, redistributed by KDPW_CCP
- Buy-in fee

VII. PROJECT TIMELINE

#	STAGE	DATE
1	Project starts	May 2020
2	Model is discussed and consulted with the market	June-September 2020
3	Modifications to KDPW_CCP regulations and systems	Q4 2020 – Q42021
4	Development and acceptance testing	Q3 2021 – Q4 2021
5	Authorisation procedure	Q2 2021 – Q1 2022
6	Implementation of amendments to KDPW_CCP regulations, tests with participants	Q1 2022
7	Service roll-out	25 April 2022

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