RECONCILING DETAILS OF REPORTS SUBMITTED TO THE KDPW_TR (EMIR) TRADE REPOSITORY

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Introduction

Counterparties to derivatives contracts concluded in different classes of derivatives subject to the reporting obligation under EMIR are required to reconcile the trade and position details according to the published technical standards. The KDPW Trade Repository and the other authorised repositories support the process by pairing and comparing the details of trades and positions reported by both counterparties. The data reconciliation process has been agreed by the trade repositories and approved by ESMA.

Each derivatives contract has two counterparties: the buying counterparty and the selling counterparty. If both counterparties are required to report the derivatives trade, both reports may be submitted to the same trade repository or to different trade repositories. After the trade date (Execution timestamp, T) or the Eligible Date of a modification, the counterparties are required to report the trade by the end of the next business day (T+1). Consequently, data reconciliation starts no earlier than the following business day (T+2) every day from Monday to Friday including bank holidays. Late reports, delivered later than the reporting deadline T+1, are included in data reconciliation on the business day following their delivery to the trade repository.

Trade and position details are verified in two steps. In the first step, reports are paired by searching for the report provided by the other counterparty. Next, the fields of the paired reports are compared within the tolerance limits. Reconciliation generates the report pairing and comparing states. The states are presented to the reporting participants in an XML message after the first reconciliation and after any change of reconciliation results.

I   Glossary: terms and definitions

1.   Abbreviations used in this document:

AT	Action Type – field in the ESMA validation table, possible values: N, M, R, V, C, E, P, Z
EEA	European Economic Area
EMIR RTS	EMIR-Technical Standards
ESMA	European Securities and Markets Authority
KDPW_TR (EMIR) Trade Repository	the Derivatives Trade Repository operated by KDPW
LEI	LEI (Legal Entity Identifier) is unique legal entity identifier composed of 20 characters issued by a local operating unit (LOU) accredited by the Global Legal Entity Identifier Foundation (GLEIF)
TR	Trade Repository
UTC	Universal Time Coordinated
UTI	Unique Trade Identifier - Trade ID
UPI	Unique Product Identifier

RSE	Report Submitting Entity
Day T	Trade date (Execution timestamp) for AT=N and AT=P and Level=T or Eligible Date for other reports
Execution timestamp	Trade execution date and time. Field 2.25 in the ESMA validation table (http://www.kdpw.pl/_layouts/download.aspx?sourceUrl=/pl/Repozytorium%20transakcji %20wersa%20EMIR/Documents/EMIR_validation_table_ESMA_122019.xlsx)

2. Definitions:

Reconciliation date	reconciliation dates are all business days according to the TARGET CALENDAR
Business day	all business days according to the TARGET CALENDAR
Paired	A UTI is paired where the TR is the trade repository for one counterparty to the trade/position which must be reported and the TR pairs the other counterparty in another TR based on the Request List (RL) or the TR has both counterparties to the trade/position which must be reported. Paired may be used as follows: (1) to include all UTIs which meet the criteria of the definition above, used for paired and unpaired reports, or (2) to include UTIs which meet the criteria of the definition above which are not matched with Category 1 and 2 fields for unpaired, paired, matched, or reconciled.
Unpaired (NPAR)	A UTI is unpaired where the TR is the trade repository for one counterparty to the trade/position which must be reported but the TR does not pair it with the other counterparty in another TR.
Unmatched 1 (ERR1)	Those UTIs which are paired by the TR with another TR, compared, and at least one Category 1 field does not match.
Unmatched 2 (ERR2)	Those UTIs which are paired by the TR with another TR, compared, and at least one Category 2 field does not match and all Category 1 fields match.
Matched (MACH)	Those UTIs which are paired by the TR with another TR, compared, and all Category 1 and Category 2 fields match.
OTC/ETD	Type of trading venue for the trade/position. OTC/ETD definitions are based on the Venue of execution table.
TARGET CALENDAR	Calendar of business days published by the European Central Bank (ECB)

II   Reports subject to reconciliation

Reconciliation is based on the last status of trades and positions during the day (trade state), which means that reconciliation includes the currently valid report as at the end of the reconciliation date unless it is excluded for any of the following reasons:

Counterparty ID type

If the identifier of a trade/position counterparty is not an LEI, the report is excluded from reconciliation. If both counterparties to a trade or position are identified by an LEI, the system checks whether the Reporting Counterparty ID and the ID of the Other Counterparty are recorded in the GLEIF database. If an LEI cannot be found in the LEI database, the derivative trade/position report is not included in reconciliation.

Country of the Other Counterparty

Reconciliation does not include reports which are unilaterally reported to the KDPW_TR (EMIR) Trade Repository and specify that the other counterparty to a trade or position has no reporting obligation, which is the case of non-EEA counterparties, based on the field Country of the Other Counterparty. The KDPW_TR (EMIR) Trade Repository system maintains an up-to-date table of EEA country codes. If the country code of the other counterparty to a trade or position is not on the EEA country list, the report is not included in reconciliation.

Trade/position identifier - Trade ID

Trade ID is validated according to the applicable rules laid down in the up-to-date EMIR validation table.

If a Trade ID does is not validated, the report is not included in reconciliation.

First report receipt date

AT=N reports received before 30 October 2017 which meet the following condition:

field Compression ='Y'

are not included in reconciliation.

Trade or position level

Reconciliation does not include positions (i.e., reports where Level='P') which were inactive as at 6 December 2019 unless:

the KDPW_TR (EMIR) Trade Repository receives a report for such position after 6 December 2019 which is not as valuation report (AT=V) or a cancellation report (AT=E, provided that it follows a prior report other than AT=V received after 6 December 2019)

or the KDPW_TR (EMIR) Trade Repository receives an RL file from another TR containing the position's key.

III Steps in the reconciliation process

Pairing

Reconciliation begins by determining which derivatives contract reports are to be reconciled. Next, pairing is performed by linking two reports for the same trade or position using their keys, i.e., the combination of the UTI and the counterparties' LEIs. To pair reports, the keys must clearly match. Pairing includes two steps:

- internal pairing,
- external pairing – with other TR.

Paired or non-paired states are recorded by the TR and non-paired reports are notified to the reporting participant (RSE). If counterparties send reports to different TRs, they exchange report keys to identify the other counterparty and enable data exchange and pairing.

Comparing

Paired reports are compared by matching data defined in Appendix 1 "Comparing EMIR RTS fields" within the tolerance limits. Comparing states are reported to the RSE in a dedicated reconciliation XML message (trar.rcn.xx.xxx).

Reconciliation workflow from the perspective of reporting participants (RSE) in the KDPW_TR (EMIR) Trade Repository:
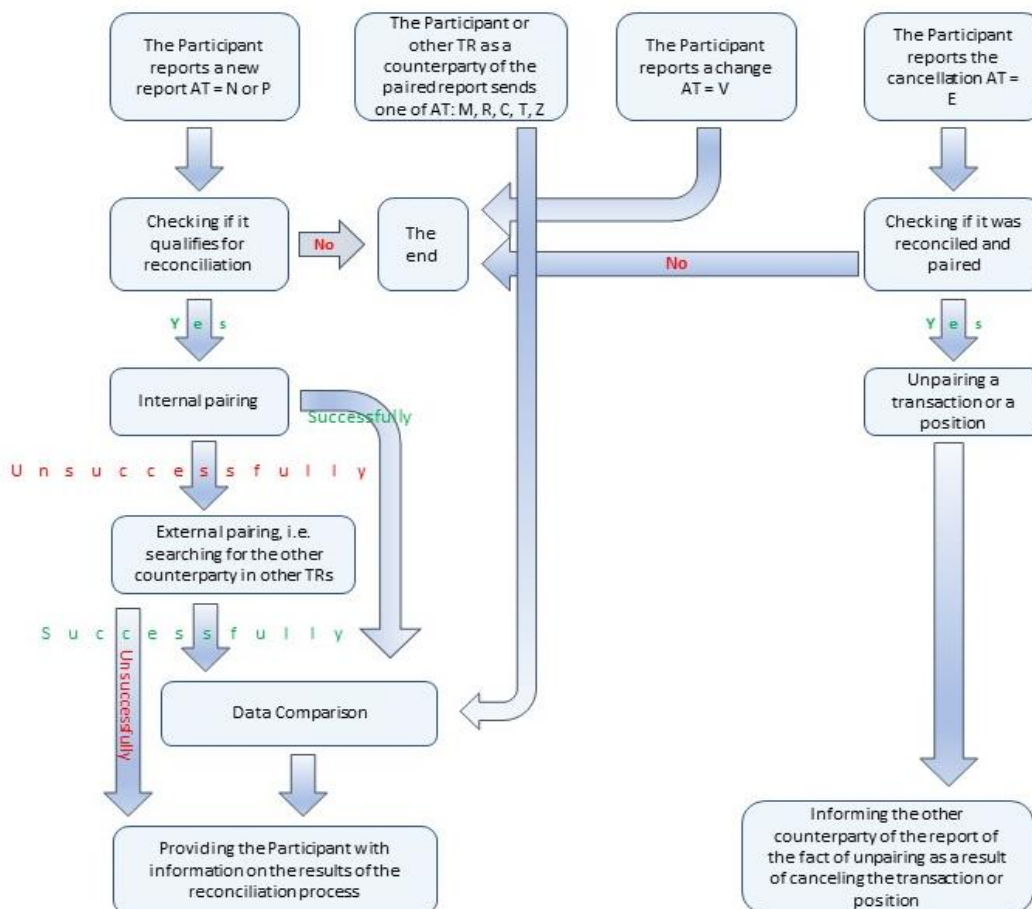
IV   Reconciliation processes

IV.1.   Pairing

The system checks every day which new trades/positions (AT=N or AT=P) are reported to the KDPW_TR (EMIR) Trade Repository. After checking whether a report is eligible for pairing, it is included in pairing. According to the Introduction, if a report is submitted to KDPW_TR on day T, it is included in pairing on day T+2 (see Example 1); reports submitted after day T, i.e., on T+1 or later are included in pairing on the day following the submission of the report (see Examples 2 and 3).

Example 1:
Transaction executed (**Execution timestamp=Day T**) on Wednesday, 1.07.2020 and reported by one counterparty on the same day is included in pairing on T+2, i.e., Friday, 3.07.2020.

Example 2:
The other counterparty to the transaction described above reports it on Thursday, 2.07.2020, i.e., on T+1, and the report is also included in pairing on T+2, i.e., Friday, 3.07.2020.

Example 3:
The other counterparty to the transaction described above reports it late, on Friday, 3.07.2020, i.e., T+2, and the report is included in pairing on the following business day (according to the **TARGET CALENDAR)** , i.e., Monday, 6.07.2020.

Reports submitted unilaterally to the Trade Repository are paired on the basis of a key composed of three parts: the UTI and the LEIs of both counterparties (Reporting Counterparty ID and ID of the Other Counterparty). If the fields in the reports match, the reports are paired.
Pairing starts with internal pairing. Reports which are not internally paired are included in external pairing.
Trade/position pairing states are recorded in the KDPW_TR (EMIR) Trade Repository database.

1.   Internal pairing of reports submitted unilaterally to the KDPW_TR (EMIR) Trade Repository

To internally pair reports of two counterparties to a trade/position, they must meet the following conditions:

   a)   the UTIs in the reports submitted on behalf of each counterparty to the trade/position match;
   b)   the counterparties' LEIs cross-match, i.e.:
-   **Reporting Counterparty ID** in Counterparty 1 report matches **ID of the Other Counterparty** in Counterparty 2 report
     and
-   **ID of the Other Counterparty** in Counterparty 1 report matches **Reporting Counterparty ID** in Counterparty 2 report.

If reports are not internally paired, they are included in external pairing.

2.   External pairing of reports submitted unilaterally to KDPW

If the other counterparty is not found in internal pairing of reports, it is assumed that the other trade/position counterparty's report has been or will be submitted to another TR. In that case, reports must be externally paired by exchanging them across trade repositories. To identify the other trade/position counterparty, the trade repositories only exchange the trade/position key comprised of three fields. When the other counterparty is identified, data described in Appendix 1 are exchanged with the relevant TR.

Inter Trade Repository reconciliation workflow
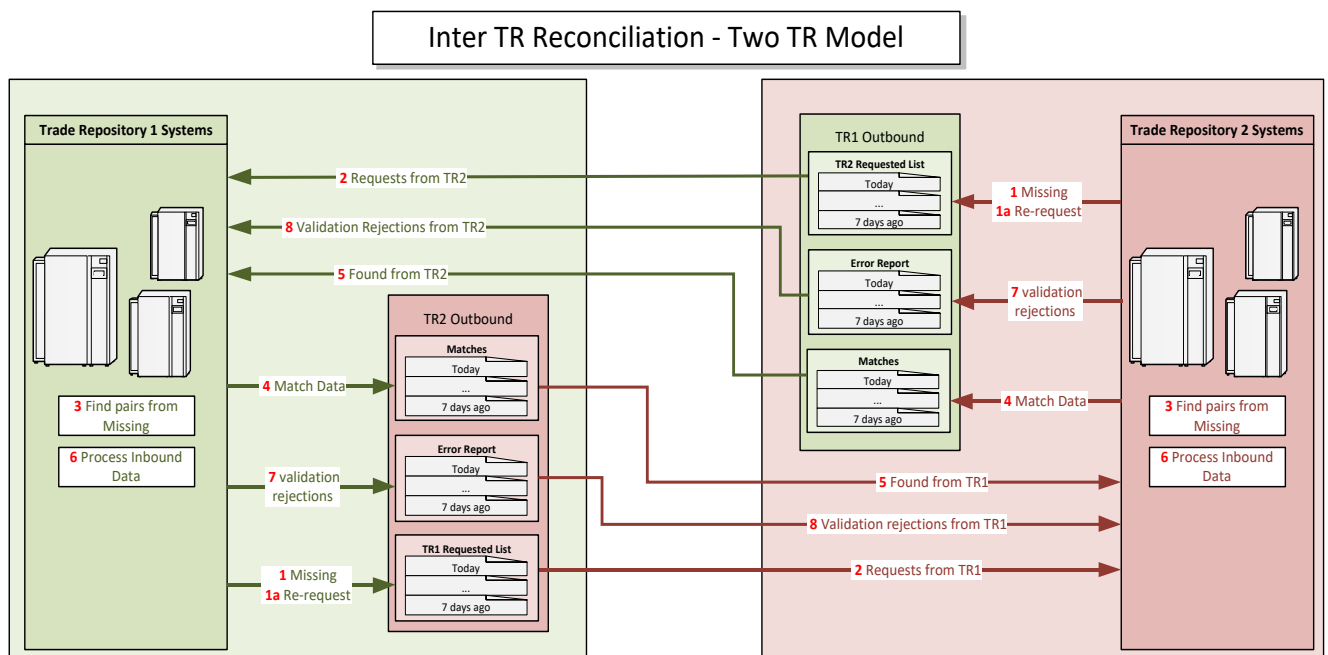
3. Reports are included in pairing until they are paired but no longer than for 7 successive business days.

4. Failed pairing

Pairing fails where no pair is found for a report. In that case, the RSE receives a message of failed pairing (see the section "Communicating the report reconciliation status" for details).

IV.2.   Comparing

Comparing includes reports with paired derivative trades/positions for which KDPW_TR (EMIR) receives a report with an action type other than AT= V or AT=E. Trade repositories exchange data for comparing at each time they receive a new trade or position report.

If the KDPW_TR (EMIR) Trade Repository database contains a key paired with another TR where the other counterparty reports a modification, we should receive the details from another TR. In that case, the KDPW_TR (EMIR) Trade Repository compares the latest details with the current details available in the KDPW_TR (EMIR) Trade Repository.

Internally and externally paired reports are compared in the same way. Unpaired reports are not compared.

Reports are compared following any modification of details (other than in the Valuation section) by either counterparty or both counterparties.

Comparing matches values and checks for differences between the corresponding fields of both counterparties to a paired trade/position. Matching is based on the following tolerance checks in report comparing (depending of data format):

Tolerance check 1:

-   trade/position values in the compared reports differ by no more than 1%;

Tolerance check 2:

- trade/position values in the compared reports match to the left of the decimal point;

Tolerance check 3:

- for OTC, the trade/position date in the date and time fields of the compared reports matches;
- for ETD, the date in the date and time fields matches and the time differs by no more than 1 hour.

OTC/ETD definitions are based on the Venue of execution table. According to the Derivatives Trade Repository Rules, OTC markets are designated as 'XXXX' or 'XOFF'.

Tolerance check 4:

- the trade/position date in the date and time fields of the compared reports matches.

The fields in the EMIR validation table are assigned to the following categories:

Category 1 – The field is compared. If the field does not match within the tolerance limits, the reporting counterparties reconcile the field values in the first place.

Category 2 – The field is compared. If the field does not match within the tolerance limits, the reporting counterparties reconcile the field values in the second place.

Category 3 – The field is not compared.

The table containing the rules for comparing reports, the tolerance checks, and the allocation of fields to categories is presented in Appendix 1: Comparing EMIR RTS fields. The fields presented in the validation table but not included in Appendix 1 are not compared.

For internally paired reports, we only use data in the KDPW_TR (EMIR) Trade Repository database.

For externally paired reports, we use data in the KDPW_TR (EMIR) Trade Repository database provided by RSE and data from another TR which has the paired report. The list of fields in a file from another TR is presented in Appendix 2.

2. Successful comparing

The trade/position comparing state is recorded in the KDPW_TR (EMIR) Trade Repository database and provided to RSE.

Comparing statuses:

ERR1 (unmatched 1) – the trade/position is paired, compared, and there is a Category 1 error in at least one field.

ERR2 (unmatched 2) – the trade/position is paired, compared, and there is a Category 2 error in at least one field and no Category 1 error in any of the fields.

MACH (matched) – the trade/position is paired, compared, and all Category 1 and Category 2 fields match within the tolerance limits.

3. Communicating the report reconciliation status

The KDPW_TR (EMIR) Trade Repository notifies its Reporting Participants (RSE) of the reconciliation status:

   a) failed pairing of reports, on a one-off basis but always after the pairing status changes to unpaired;
   b) each comparing status, including:
- all Category 1 errors in compared reports, including the value in the compared field of the other trade/position counterparty;
- all Category 2 errors in compared reports, including the value in the compared field of the other trade/position counterparty;
- no error in compared reports.

KDPW reports the reconciliation status in a dedicated message (trar.rcn.001.XX, where XX is the current message version). The list of error codes presented in rcn messages is provided in Appendix 2 List of reconciliation error codes.

Report reconciliation status messages include the general reconciliation status (according to point 2) and a repeated section [1..n] presenting all error reason codes and descriptions for every error identified in comparing. Furthermore, if errors are identified, the value in the counterparty's field is presented by the other counterparty. Examples of rcn reports are presented below:

A. Tags `<CtrPtyVal>` and `<OthrCtrPtyVal>` present two values which, when compared, result in a Category 1 error:

```
<trar.rcn.001.03>

        ……

        <Sts>

                <StsCd>ERR1</StsCd>

                <Rsn>

                        <RsnCd>ECNF</RsnCd>

                        <RsnTxt>Inconsistency in field Confirmation timestamp</RsnTxt>

                        <CtrPtyVal>2020-06-16T10:00:00</CtrPtyVal>

                        <OthrCtrPtyVal>2020-06-18T12:18:43</OthrCtrPtyVal>

                </Rsn>

                <Rsn>

                        <RsnCd>ECNM</RsnCd>

                        <RsnTxt>Inconsistency in field Confirmation means</RsnTxt>

                        <CtrPtyVal>E</CtrPtyVal>

                        <OthrCtrPtyVal>Y</OthrCtrPtyVal>

                </Rsn>

        </Sts>

</trar.rcn.001.03>
```

B. For an unpaired reports `<StsCd>NPAR</StsCd>,` its pairing date has the defauilt value <ParDt>0001-01-01</ParDt> because a pairing date must be provided.

```
<trar.rcn.001.03>

        <GnlInf>

                ……

                <ParDt>0001-01-01</ParDt>

                ……

                <Lnk>

                        <UnqTradIdr> UTI0123456789</UnqTradIdr>

                        <RptgCtrPtyId>LEI_1</RptgCtrPtyId>

                        <OthrCtrPtyId>LEI_2</OthrCtrPtyId>

                </Lnk>
```

```
        </GnlInf>
        <Sts>
                <StsCd>NPAR</StsCd>
                <Rsn>
                        <RsnCd>XXXX</RsnCd>
                </Rsn>
        </Sts>

</trar.rcn.001.03>
```

C. If both counterparties' reports fully match, the following example message is sent:

```
<trar.rcn.001.03>
        <GnlInf>
                <SndrMsgRef>00000000</SndrMsgRef>
                <RepTmStmp>2020-06-24T18:05:18.3781253Z</RepTmStmp>
                <ParDt>2020-06-24</ParDt>
                <CompDt>2020-06-24</CompDt>
                <EligDt>2020-06-22</EligDt>
                <Lnk>
                        <UnqTradIdr>UTI0123456789</UnqTradIdr>
                        <RptgCtrPtyId>LEI_1</RptgCtrPtyId>
                        <OthrCtrPtyId>LEI_2</OthrCtrPtyId>
                </Lnk>
        </GnlInf>
        <Sts>
                <StsCd>MACH</StsCd>
                <Rsn>
                        <RsnCd>XXXX</RsnCd>
                </Rsn>
        </Sts>
</trar.rcn.001.03>
```

V   Appendices

V.1.   Appendix 1 - Comparing EMIR RTS fields

RTS Field	RTS Name	ESMA Level 2 Format	Match/ Tolerance Rule to other trade	Category
1.2	Reporting Counterparty ID	ISO 17442 Legal Entity Identifier (LEI) 20 alphanumerical character code.	Field specific rule Must match ID of the other counterparty	1

RTS Field	RTS Name	ESMA Level 2 Format	Match/ Tolerance Rule to other trade	Category
1.4	ID of the other counterparty	ISO 17442 Legal Entity Identifier (LEI) 20 alphanumerical character code. Client code (up to 50 alphanumerical digits).	Field specific rule Must match Reporting Counterparty ID	1
1.14	Counterparty side	B = Buyer S = Seller Populated in accordance with Article 3a	Field specific rule Must be S if B or must be B if S	1
2.1	Contract type	CD = Financial contracts for difference FR = Forward rate agreements FU = Futures FW = Forwards OP = Option SB = Spreadbet SW = Swap ST = Swaption OT = Other	Exact match	1
2.2	Asset class	CO = Commodity and emission allowances CR = Credit CU = Currency EQ = Equity IR = Interest Rate	Exact match	1
2.3	Product classification type	C = CFI U = UPI	Exact match	2
2.4	Product classification	ISO 10692 CFI, 6 characters alphabetical code Endorsed UPI	First 2 characters of CFI code must match	2
2.5	Product identification type	Specify the applicable identification: I = ISIN A = AII	Exact match	1
2.6	Product identification	For product identifier type I: ISO 6166 ISIN 12 character alphanumerical code For product identifier type A: Complete AII code in accordance with Article 4(8)	Must match if field 2.5 is ISIN.	1

RTS Field	RTS Name	ESMA Level 2 Format	Match/ Tolerance Rule to other trade	Category
2.7	Underlying identification type	I = ISIN A = AII U = UPI B = Basket X = Index	Exact match	1
2.8	Underlying identification	For underlying identification type I: ISO 6166 ISIN 12 character alphanumerical code For underlying identification type A: complete AII code in accordance with Article 4(8) For underlying identification type U: UPI For underlying identification type B: all individual components identification through ISO 6166 ISIN or complete AII code in accordance with Article 4(8). Identifiers of individual components shall be separated with a dash "-". For underlying identification type X: ISO 6166 ISIN if available, otherwise full name of the index as assigned by the index provider	Exact match Must match where Underlying identification type = I, U, NA, or X. Do not reconcile where Underlying identification type=B or A". TDD Generation - The population logic of Underlying Identification in TDD file will be as follows: When Underlying Identification Type = "X" or "I" and Underlying Identification is ISIN (Identified by exact 12 alphanumeric characters), then populate value for Underlying Identification. When Underlying Identification Type = "X" or "I" and Underlying Identification is NOT ISIN (Identified by string length NOT 12 characters), then DO NOT populate value for Underlying Identification in TDD file.	1
2.9	Notional currency 1	ISO 4217 Currency Code, 3 alphabetical digits.	Exact match	1
2.10	Notional currency 2	ISO 4217 Currency Code, 3 alphabetical digits.	Exact match	2
2.11	Deliverable currency	ISO 4217 Currency Code, 3 alphabetical digits.	Do not compare	3

RTS Field	RTS Name	ESMA Level 2 Format	Match/ Tolerance Rule to other trade	Category
2.12	Trade ID	Until global UTI is available, up to 52 alphanumerical character code including four special characters: . - _ : Special characters are not allowed at the beginning and at the end of the code. No space allowed. Note: the RTS allows . - _ . (full stop, hyphen, underscore and full stop again).	Exact match	1
2.13	Report tracking number	An alphanumeric field up to 52 characters	Do Not Compare	3
2.14	Complex trade component ID	An alphanumerical field up to 35 characters	Do not Compare	3
2.15	Venue of execution	ISO 10383 Market Identifier Code (MIC), 4 digits alphabetical. Where relevant, XOFF for listed derivatives that are traded off-exchange or XXXX for OTC derivatives.	Exact Match	2
2.16	Compression	Y = if the contract results from compression; N= if the contract does not result from compression.	Exact Match	2
2.17	Price / rate	Up to 20 numerical characters including decimals. The decimal mark is not counted as a numerical character. If populated, it shall be represented by a dot. The negative symbol, if populated, is not counted as a numerical character. In case the price is reported in percent values, it should be expressed as percentage where 100% is represented as "100"	Field specific rule Apply tolerance rule 1, to both absolute value or reciprocal.	2
2.18	Price notation	U = Units P = Percentage Y = Yield	Exact match	1
2.19	Currency of price	ISO 4217 Currency Code, 3 alphabetic characters	Exact match	1

RTS Field	RTS Name	ESMA Level 2 Format	Match/ Tolerance Rule to other trade	Category
2.20	Notional	Up to 20 numerical characters including decimals. The decimal mark is not counted as a numerical character. If populated, it shall be represented by a dot. The negative symbol, if populated, is not counted as a numerical character.	Apply tolerance check 2.	1
2.21	Price multiplier	Up to 20 numerical characters including decimals. The decimal mark is not counted as a numerical character. If populated, it shall be represented by a dot.	Apply tolerance check 1.	1
2.22	Quantity	Up to 20 numerical characters including decimals. The decimal mark is not counted as a numerical character. If populated, it shall be represented by a dot.	Exact match	1
2.23	Up-front payment	Up to 20 numerical characters including decimals. The negative symbol to be used to indicate that the payment was made, not received. The decimal mark is not counted as a numerical character. If populated, it shall be represented by a dot. The negative symbol, if populated, is not counted as a numerical character.	Do not compare	3
2.24	Delivery type	C=Cash, P=Physical, O=Optional for counterparty.	Exact match	2
2.25	Execution timestamp	ISO 8601 date in the UTC time format YYYY-MM-DDThh:mm:ssZ	Field Specific Rule Apply tolerance check 3.	2
2.26	Effective date	ISO 8601 date in the format YYYY-MM-DD	Exact match	2
2.27	Maturity date	ISO 8601 date in the format YYYY-MM-DD	Exact match	1
2.28	Termination date	ISO 8601 date in the format YYYY-MM-DD	Exact match	2
2.29	Settlement date	ISO 8601 date format. Note that RTS defines this as date of settlement of the underlying	Do Not Compare	3
2.30	Master Agreement type	Free Text, field of up to 50 characters, identifying the name of the Master Agreement used, if any.	Do Not Compare	3

RTS Field	RTS Name	ESMA Level 2 Format	Match/ Tolerance Rule to other trade	Category
2.31	Master Agreement version	ISO 8601 date in the format YYYY	Do Not Compare	3
2.32	Confirmation timestamp	ISO 8601 date in the UTC time format YYYY-MM-DDThh:mm:ssZ	Only reconcile where Confirmation Means = E or N Apply tolerance check 4.	2
2.33	Confirmation means	Y=Non-electronically confirmed, N=Non-confirmed, E=Electronically confirmed.	Exact match	2
2.34	Clearing obligation	Y = Yes N = No X = NA	Exact match	2
2.35	Cleared	Y=Yes, N=No.	Exact match	1
2.36	Clearing timestamp	ISO 8601 date in the UTC time format YYYY-MM-DDThh:mm:ssZ	Apply tolerance check 4.	2
2.37	CCP	ISO 17442 Legal Entity Identifier (LEI) 20 alphanumerical character code.	Exact match	2
2.38	Intragroup	Y=Yes, N=No.	Exact match	2
2.39	Fixed rate of leg 1	Up to 10 numerical characters including decimals expressed as percentage where 100% is represented as "100". The decimal mark is not counted as a numerical character. If populated, it shall be represented by a dot.The negative symbol, if populated, is not counted as a numerical character.	Sort values based on Fixed Rate in ascending order and perform comparison	2
2.40	Fixed rate of leg 2	Up to 10 numerical characters including decimals expressed as percentage where 100% is represented as "100". The decimal mark is not counted as a numerical character. If populated, it shall be represented by a dot. The negative symbol, if populated, is not counted as a numerical character.	Sort values based on Fixed Rate in ascending order and perform comparison	2
2.41	Fixed rate day count leg 1	Actual/365, 30B/360 or Other.	Do Not Compare	3
2.42	Fixed rate day count leg 2	Actual/365, 30B/360 or Other.	Do Not Compare	3
2.43	Fixed rate payment frequency leg 1 –time period	Time period describing how often the counterparties exchange payments, whereby the following abbreviations apply: Y = Year M = Month W = Week D = Day	Do Not Compare	3

RTS Field	RTS Name	ESMA Level 2 Format	Match/ Tolerance Rule to other trade	Category
2.44	Fixed rate payment frequency leg 1 – multiplier	Integer multiplier of the time period describing how often the counterparties exchange payments. Up to 3 numerical characters.	Do Not Compare	3
2.45	Fixed rate payment frequency leg 2 –time period	Time period describing how often the counterparties exchange payments, whereby the following abbreviations apply: Y = Year M = Month W = Week D = Day	Do Not Compare	3
2.46	Fixed rate payment frequency leg 2 - multiplier	Integer multiplier of the time period describing how often the counterparties exchange payments. Up to 3 numerical characters.	Do Not Compare	3
2.47	Floating rate payment frequency leg 1 – time period	Time period describing how often the counterparties exchange payments, whereby the following abbreviations apply: Y = Year M = Month W = Week D = Day	Do Not Compare	3
2.48	Floating rate payment frequency leg 1 – multiplier	Integer multiplier of the time period describing how often the counterparties exchange payments. Up to 3 numerical characters.	Do Not Compare	3
2.49	Floating rate payment frequency leg 2 – time period	Time period describing how often the counterparties exchange payments, whereby the following abbreviations apply: Y = Year M = Month W = Week D = Day	Do Not Compare	3
2.50	Floating rate payment frequency leg 2 – multiplier	Integer multiplier of the time period describing how often the counterparties exchange payments. Up to 3 numerical characters.	Do Not Compare	3
2.51	Floating rate reset frequency leg 1 – time period	Time period describing how often the counterparties reset the floating rate, whereby the following abbreviations apply: Y = Year M = Month W = Week D = Day	Do Not Compare	3
2.52	Floating rate reset frequency leg 1 - multiplier	Integer multiplier of the time period describing how often the counterparties reset the floating rate. Up to 3 numerical characters.	Do Not Compare	3
2.53	Floating rate reset frequency leg 2- time period	Time period describing how often the counterparties reset the floating rate, whereby the following abbreviations apply: Y = Year M = Month W = Week D = Day	Do Not Compare	3

RTS Field	RTS Name	ESMA Level 2 Format	Match/ Tolerance Rule to other trade	Category
2.54	Floating rate reset frequency leg 2 - multiplier	Integer multiplier of the time period describing how often the counterparties reset the floating rate. Up to 3 numerical characters.	Do Not Compare	3
2.55	Floating rate of leg 1	'EONA' – EONIA 'EONS' - EONIA SWAP 'EURI' - EURIBOR 'EUUS' – EURODOLLAR 'EUCH' – EuroSwiss 'GCFR' - GCF REPO 'ISDA' – ISDAFIX 'LIBI' - LIBID 'LIBO' - LIBOR 'MAAA' – Muni AAA 'PFAN' - Pfandbriefe 'TIBO' – TIBOR 'STBO' – STIBOR 'BBSW' – BBSW 'JIBA' – JIBAR 'BUBO' – BUBOR 'CDOR' – CDOR 'CIBO' – CIBOR 'MOSP' – MOSPRIM 'NIBO' – NIBOR 'PRBO' – PRIBOR 'TLBO' – TELBOR 'WIBO' – WIBOR 'TREA' – Treasury 'SWAP' – SWAP 'FUSW' – Future SWAP Or up to 25 alphanumerical characters if the reference rate is not included in the above list	Do Not Compare	3
2.56	Floating rate reference period leg 1 – time period	Time period describing reference period, whereby the following abbreviations apply: Y = Year M = Month W = Week D = Day	Do Not Compare	3
2.57	Floating rate reference period leg 1 – multiplier	Integer multiplier of the time period describing the reference period. Up to 3 numerical characters.	Do Not Compare	3
2.58	Floating rate of leg 2	'EONA' – EONIA 'EONS' - EONIA SWAP 'EURI' - EURIBOR 'EUUS' – EURODOLLAR 'EUCH' – EuroSwiss 'GCFR' - GCF REPO 'ISDA' – ISDAFIX 'LIBI' - LIBID 'LIBO' - LIBOR 'MAAA' – Muni AAA 'PFAN' - Pfandbriefe 'TIBO' – TIBOR 'STBO' – STIBOR 'BBSW' – BBSW 'JIBA' – JIBAR 'BUBO' – BUBOR 'CDOR' – CDOR 'CIBO' – CIBOR 'MOSP' – MOSPRIM 'NIBO' – NIBOR 'PRBO' – PRIBOR 'TLBO' – TELBOR 'WIBO' – WIBOR 'TREA' – Treasury 'SWAP' – SWAP 'FUSW' – Future SWAP Or up to 25 alphanumerical characters if the reference rate is not included in the above list	Do Not Compare	3
2.59	Floating rate reference period leg 2 – time period	Time period describing reference period, whereby the following abbreviations apply: Y = Year M = Month W = Week D = Day	Do not compare	3

RTS Field	RTS Name	ESMA Level 2 Format	Match/ Tolerance Rule to other trade	Category
2.60	Floating rate reference period leg 2 – multiplier	Integer multiplier of the time period describing the reference period. Up to 3 numerical characters.	Do not compare	3
2.61	Delivery currency 2	ISO 4217 Currency Code, 3 alphabetical digits or 'XXX'	Do not compare	3
2.62	Exchange rate 1	Up to 10 numerical digits including decimals. The decimal mark is not counted as a numerical character. If populated, it shall be represented by a dot. The negative symbol, if populated, is not counted as a numerical character.	Apply tolerance check 1.	2
2.63	Forward exchange rate	Up to 10 numerical digits including decimals. The decimal mark is not counted as a numerical character. If populated, it shall be represented by a dot. The negative symbol, if populated, is not counted as a numerical character.	Apply tolerance check 1.	2
2.64	Exchange rate basis	Two ISO 4217 currency codes separated by "/". First currency code shall indicate the base currency, and the second currency code shall indicate the quote currency.	Direct comparison on string value	2
2.65	Commodity base	AG = Agricultural EN = Energy FR = Freights ME = Metals IN = Index EV = Environmental EX = Exotic OT = Other	Exact match	1

RTS Field	RTS Name	ESMA Level 2 Format	Match/ Tolerance Rule to other trade	Category
2.66	Commodity details	Agricultural GO = Grains oilseeds DA = Dairy LI = Livestock FO = Forestry SO = Softs SF = Seafood OT = Other Energy OI = Oil NG = Natural gas CO = Coal EL = Electricity IE = Inter-energy OT = Other Freights DR = Dry WT = Wet OT = Other Metals PR = Precious NP = Non-precious Environmental WE = Weather EM = Emissions OT = Other	Exact match	2
2.67	Delivery point or zone	EIC code, 16 character alphanumeric code. Repeatable field.	Do not compare	3
2.68	Interconnection point	EIC code, 16 character alphanumeric code.	Do not compare	3
2.69	Load type	BL = Base Load PL = Peak Load OP = Off-Peak BH = Hour/Block Hours SH = Shaped GD = Gas Day OT = Other	Do not compare	3
2.70	Load delivery intervals	hh:mmZ	Do not compare	3
2.71	Delivery start date and time	ISO 8601 date in the UTC time format YYYY-MM-DDThh:mm:ssZ	Do not compare	3
2.72	Delivery end date and time	ISO 8601 date in the UTC time format YYYY-MM-DDThh:mm:ssZ	Do not compare	3
2.73	Duration	N=Minutes H= Hour D= Day W=Week M=Month Q = Quarter S= Season Y= Annual O=Other	Do not compare	3

RTS Field	RTS Name	ESMA Level 2 Format	Match/ Tolerance Rule to other trade	Category
2.74	Days of the week	WD = Weekdays WN = Weekend MO = Monday TU = Tuesday WE = Wednesday TH = Thursday FR = Friday SA = Saturday SU = Sunday Multiple values separated by "/ " are permitted	Do not compare	3
2.75	Delivery capacity	Up to 20 numerical digits including decimals The decimal mark is not counted as a numerical character. If populated, it shall be represented by a dot. The negative symbol, if populated, is not counted as a numerical character.	Do not compare	3
2.76	Quantity Unit	KW KWh/h KWh/d MW MWh/h MWh/d GW GWh/h GWh/d Therm/d KTherm/d MTherm/d cm/d mcm/d	Do not compare	3
2.77	Price/time interval quantities	Up to 20 numerical characters including decimals. The decimal mark is not counted as a numerical character. If populated, it shall be represented by a dot. The negative symbol, if populated, is not counted as a numerical character.	Do not compare	3

RTS Field	RTS Name	ESMA Level 2 Format	Match/ Tolerance Rule to other trade	Category
2.78	Option type	P = Put C = Call O = where it cannot be determined whether it is a call or a put	Exact match	1
2.79	Option exercise style	A = American B = Bermudan E = European S = Asian More than one value is allowed	Exact match	2
2.80	Strike price (cap/floor rate)	Up to 20 numerical characters including decimals. The decimal mark is not counted as a numerical character. If populated, it shall be represented by a dot. The negative symbol, if populated, is not counted as a numerical character. Where the strike price is reported in percent values, it should be expressed as percentage where 100% is represented as"100"	Apply tolerance check 1.	1
2.81	Strike price notation	U = Units P = Percentage Y = Yield	Exact match	1
2.82	Maturity date of the underlying	ISO 8601 date in the format YYYY-MM-DD	Exact match	1
2.83	Seniority	SNDB = Senior, such as Senior Unsecured Debt (Corporate/Financial), Foreign Currency Sovereign Debt(Government), SBOD = Subordinated, such as Subordinated or Lower Tier 2 Debt (Banks), Junior Subordinated or Upper Tier 2 Debt(Banks), OTHR = Other, such as Preference Shares or Tier 1 Capital (Banks) or other credit derivatives Y	Exact match	2
2.84	Reference entity	ISO 3166 - 2 character country code or ISO 3166-2 - 2 character country code followed by dash "-" and up to 3 alphanumeric character country subdivision code or ISO 17442 Legal Entity Identifier (LEI) 20 alphanumerical character code	Exact match	2

RTS Field	RTS Name	ESMA Level 2 Format	Match/ Tolerance Rule to other trade	Category
2.85	Frequency of payment	MNTH = Monthly QURT = Quarterly MIAN = Semi-annually YEAR = Yearly	Exact match	2
2.86	The calculation basis	Numerator/Denominator where both, Numerator and Denominator are numerical characters or alphabetic expression 'Actual', e.g. 30/360 or Actual/365	Do not compare	3
2.87	Series	Integer field up to 5 characters	Exact match	2
2.88	Version	Integer field up to 5 characters	Exact match	2
2.89	Index factor	Up to 10 numerical characters including decimals. The decimal mark is not counted as a numerical character. If populated, it shall be represented by a dot.	Apply tolerance check 1.	2
2.90	Tranche	T=Tranched U=Untranched	Exact match	2
2.91	Attachment point	Up to 10 numerical characters including decimals expressed as a decimal fraction between 0 and 1. The decimal mark is not counted as a numerical character. If populated, it shall be represented by a dot.	Apply tolerance check 1.	2
2.92	Detachment point	Up to 10 numerical characters including decimals expressed as a decimal fraction between 0 and 1.The decimal mark is not counted as a numerical character. If populated, it shall be represented by a dot.	Apply tolerance check 1.	2
2.93	Action type	N = New M = Modify E = Error C = Early Termination R = Correction Z = Compression V = Valuation update P = Position component	Do not compare	3

RTS Field	RTS Name	ESMA Level 2 Format	Match/ Tolerance Rule to other trade	Category
-	-	Inter-TR status: E = Error M = Modified data, rerun reconciliation request R = Reconciliation request X = Pairing removal	Special rules defined in the *Process TDD files from other TRs* section.	3
2.94	Level	T = Trade P = Position	Exact match	1

V.2. Appendix 2 – List of reconciliation error codes

List of available reconciliation error reason codes (RsnCd) and status codes (StsCd):

Status Code (StsCd)	Reason Code (RsnCd)	Reason Text (RsnTxt)
MACH	XXXX	Trade reconciled correctly
NPAR	XXXX	Trade not paired
ERCD	CPCT	Value in field Subject to EMIR obligation inconsistent with other counterparty report
ERCD	ERL1	Invalid LEI in field Reporting Counterparty ID
ERCD	ERL2	Invalid LEI in field ID of the Other Counterparty
ERCD	ERUT	Invalid UTI
ERR1	EASC	Inconsistency in field Asset class
ERR1	ECLR	Inconsistency in field Cleared
ERR1	ECMB	Inconsistency in field Commodity base
ERR1	ECOP	Inconsistency in field Currency of price
ERR1	ECPS	Inconsistency in field Counterparty side
ERR1	ECTP	Inconsistency in field Contract type
ERR1	ELVL	Inconsistency in field Level
ERR1	EMTR	Inconsistency in field Maturity date
ERR1	EMTU	Inconsistency in field Maturity date of the underlying
ERR1	ENC1	Inconsistency in field Notional currency 1
ERR1	ENOT	Inconsistency in field Notional
ERR1	EOTP	Inconsistency in field Option type
ERR1	EPID	Inconsistency in field Product identification
ERR1	EPMT	Inconsistency in field Price multiplier
ERR1	EPNT	Inconsistency in field Price notation
ERR1	EPTP	Inconsistency in field Product identification type
ERR1	EQNT	Inconsistency in field Quantity
ERR1	ESPN	Inconsistency in field Strike price notation
ERR1	ESTP	Inconsistency in field Strike price (cap/floor rate)
ERR1	EUID	Inconsistency in field Underlying identification
ERR1	EUTP	Inconsistency in field Underlying identification type
ERR2	EATP	Inconsistency in field Attachment point
ERR2	ECCP	Inconsistency in field CCP
ERR2	ECLO	Inconsistency in field Clearing obligation
ERR2	ECLT	Inconsistency in field Clearing timestamp
ERR2	ECMD	Inconsistency in field Commodity details
ERR2	ECMP	Inconsistency in field Compression
ERR2	ECNF	Inconsistency in field Confirmation timestamp
ERR2	ECNM	Inconsistency in field Confirmation means
ERR2	EDEL	Inconsistency in field Delivery type
ERR2	EDTP	Inconsistency in field Detachment point

ERR2	EEFF	Inconsistency in field Effective date
ERR2	EERB	Inconsistency in field Exchange rate basis
ERR2	EEXC	Inconsistency in field Execution timestamp
ERR2	EEXR	Inconsistency in field Exchange rate
ERR2	EFER	Inconsistency in field Forward exchange rate
ERR2	EFOP	Inconsistency in field Frequency of payment
ERR2	EFX1	Inconsistency in field Fixed rate leg 1
ERR2	EFX2	Inconsistency in field Fixed rate leg 2
ERR2	EINF	Inconsistency in field Index factor
ERR2	EINT	Inconsistency in field Intragroup
ERR2	ENC2	Inconsistency in field Notional currency 2
ERR2	EOEX	Inconsistency in field Option exercise style
ERR2	EPDC	Inconsistency in field Product classification - 2 first characters
ERR2	EPDT	Inconsistency in field Product classification type
ERR2	EPRT	Inconsistency in field Price / rate
ERR2	EREN	Inconsistency in field Reference entity
ERR2	ESER	Inconsistency in field Series
ERR2	ESNR	Inconsistency in field Seniority
ERR2	ETRM	Inconsistency in field Termination date
ERR2	ETRN	Inconsistency in field Tranche
ERR2	EVER	Inconsistency in field Version
ERR2	EVOE	Inconsistency in field Venue of execution