

SFTR Data Quality indicators

1 Introduction

1. This document contains specifications of the SFTR Data Quality Dashboard which has been developed following to the BoS decision on revised approach to supervisory convergence on EMIR and SFTR data quality.¹
2. The purpose of the dashboard is to enable continuous monitoring on an objective basis of the improvement/decline in the SFTR data quality on EU level. Furthermore, the dashboard will assist NCAs and ESMA in proactively setting supervisory priorities and will allow to timely detect any major irregularities in the reporting.
3. Where the results of the dashboard lead to identification of significant data quality issues (in line with the criteria specified in the Framework for provision of data and follow-up on SFTR data quality issues²), ESMA may share the granular data with the NCAs for their follow-up with the relevant entities. In line with that Framework, ESMA will share with the NCAs the data pertaining to the entities responsible for reporting (ERR) whose incorrect reports constitute at least 1% of all incorrect reports in the EU. In the case of ERRs that are financial counterparties established in the third countries, the granular data will be shared with the NCA of the branch through which the SFTs were concluded.
4. The specifications will be reviewed by the DSC when needed and maximum on an annual basis, with a view to strike a balance between a need to calibrate the indicators and the risk of too frequent changes in the methodology that could undermine the comparability of the results over time.

2 Indicators

5. The dashboard will contain the following tests:

¹ ESMA74-362-2445 Report on strategic approach to supervisory convergence work on EMIR and SFTR data quality

² ESMA74-362-2541 Framework for provision of data and follow-up on SFTR data quality issues

| No | Test | Description | Dataset | ESMA output | Problems addressed | Non-compliance |
|----|--------------------------|--|---------|--|--|--|
| 1A | Nr of outstanding trades | <p>A difference in the number of outstanding SFTs at trade level between a given pair of counterparties as reported by the two sides.</p> <p>Trades where other counterparty is non-EEA or is identified with a client code are excluded</p> <p>At counterparty level (aggregated at a level of entities responsible for reporting):</p> <p><u>Absolute results:</u> [Number of outstanding SFTs at trade level reported by CP A where CP B is the other counterparty] - [Number of outstanding SFTs at trade level reported by CP B where CP A is the other counterparty]</p> <p><u>Percentage results:</u> [Number of outstanding SFTs at trade level reported by CP A where CP B is the other counterparty] - [Number of outstanding SFTs at trade level reported by CP B where CP A is the other counterparty] / [Number of outstanding SFTs at trade level reported by CP A where CP B is the other counterparty] </p> <p>At jurisdiction level:</p> <p><u>Absolute results:</u> Sum of the absolute values of the absolute results at counterparties pair level, where entity responsible for reporting pertains to a given jurisdiction</p> <p><u>Percentage results:</u> Sum of the absolute values of the absolute results at counterparties pair level, where entity responsible for reporting pertains to a given jurisdiction / total number of outstanding transactions at trade level</p> | TSR | Absolute and percentage number at EU level | Under/over reporting Reporting at T/P level | 2- Misreporting by one of the CPs/ERRs |

| No | Test | Description | Dataset | ESMA output | Problems addressed | Non-compliance |
|----|-----------------------------|---|---------|--|--|--|
| 1B | Nr of outstanding positions | <p>A difference in the number of outstanding SFTs at position level between a given pair of counterparties as reported by the two sides.</p> <p>Trades where other counterparty is non-EEA or is identified with a client code are excluded</p> <p>At counterparty level (aggregated at a level of entities responsible for reporting):</p> <p><u>Absolute results:</u></p> <p>[Number of outstanding SFTs at position level reported by CP A where CP B is the other counterparty] - [Number of outstanding SFTs at position level reported by CP B where CP A is the other counterparty]</p> <p><u>Percentage results:</u></p> <p> [Number of outstanding SFTs at position level reported by CP A where CP B is the other counterparty] - [Number of outstanding SFTs at position level reported by CP B where CP A is the other counterparty] / Number of outstanding SFTs at position level reported by CP A where CP B is the other counterparty</p> <p>At jurisdiction level:</p> <p><u>Absolute results:</u></p> <p>Sum of the absolute values of the absolute results at counterparties pair level, where entity responsible for reporting pertains to a given jurisdiction</p> <p><u>Percentage results:</u></p> <p>Sum of the absolute values of the absolute results at counterparties pair level, where entity responsible for reporting pertains to a given jurisdiction / total number of outstanding transactions at position level</p> | TSR | Absolute and percentage number at EU level | Under/over reporting Reporting at T/P level | 2- Misreporting by one of the CPs/ERRs |

| No | Test | Description | Dataset | ESMA output | Problems addressed | Non-compliance |
|----|-------------------------|---|---------|--|-----------------------------------|--|
| 1C | Nr of reports with AT=N | <p>A difference in the number of reports with action type 'New' submitted during the previous month by the two sides</p> <p>Reports where other counterparty is non-EEA or is identified with a client code are excluded</p> <p>At counterparty level (aggregated at a level of entities responsible for reporting):</p> <p><u>Absolute results:</u></p> <p>[Number of reports with action type 'New' submitted during the previous month by CP A where CP B is the other counterparty] - [Number of reports with action type 'New' submitted during the previous month by CP B where CP A is the other counterparty]</p> <p><u>Percentage results:</u></p> <p> [Number of reports with action type 'New' submitted during the previous month by CP A where CP B is the other counterparty] - [Number of reports with action type 'New' submitted during the previous month by CP B where CP A is the other counterparty] / [Number of reports with action type 'New' submitted during the previous month by CP A where CP B is the other counterparty]</p> <p>At jurisdiction level:</p> <p><u>Absolute results:</u></p> <p>Sum of the absolute values of the absolute results at counterparties pair level, where entity responsible for reporting pertains to a given jurisdiction</p> <p><u>Percentage results:</u></p> <p>Sum of the absolute values of the absolute results at counterparties pair level, where entity responsible for reporting pertains to a given jurisdiction / total number of reports with action type 'New'</p> | TAR | Absolute and percentage number at EU level | Under/over reporting at T/P level | 2- Misreporting by one of the CPs/ERRs |

| No | Test | Description | Dataset | ESMA output | Problems addressed | Non-compliance |
|----|-------------------------|--|---------|--|--|--|
| 1D | Nr of reports with AT=P | <p>A difference in the number of reports with action type 'Position component' submitted during the previous month by the two sides</p> <p>Reports where other counterparty is non-EEA or is identified with a client code are excluded</p> <p>At counterparty level (aggregated at a level of entities responsible for reporting):</p> <p><u>Absolute results:</u></p> <p>[Number of reports with action type 'Position component' submitted during the previous month by CP A where CP B is the other counterparty] - [Number of reports with action type 'Position component' submitted during the previous month by CP B where CP A is the other counterparty]</p> <p><u>Percentage results:</u></p> <p>At jurisdiction level:</p> <p> [Number of reports with action type 'Position component' submitted during the previous month by CP A where CP B is the other counterparty] - [Number of reports with action type 'Position component' submitted during the previous month by CP B where CP A is the other counterparty] / [Number of reports with action type 'Position component' submitted during the previous month by CP A where CP B is the other counterparty]</p> <p><u>Absolute results:</u></p> <p>Sum of the absolute values of the absolute results at counterparties pair level, where entity responsible for reporting pertains to a given jurisdiction</p> <p><u>Percentage results:</u></p> <p>Sum of the absolute values of the absolute results at counterparties pair level, where entity responsible for reporting pertains to a given jurisdiction / total number of reports with action type 'Position component'</p> | TAR | Absolute and percentage number at EU level | Under/over reporting Reporting at T/P level | 2- Misreporting by one of the CPs/ERRs |

| No | Test | Description | Dataset | ESMA output | Problems addressed | Non-compliance |
|----|------------------|--|---------|--|------------------------------|--|
| 2A | Unpaired reports | <p>Number of outstanding unpaired SFTs.</p> <p>At counterparty level (aggregated at a level of entities responsible for reporting):</p> <p><u>Absolute results:</u> [Number of outstanding SFTs for which 'Both_counterparties_reporting'=='True' and 'Paired_status'=='False']</p> <p><u>Percentage results:</u> [Number of outstanding SFTs for which 'Both_counterparties_reporting'=='True' and 'Paired_status'=='False'] [Number of outstanding SFTs for which 'Both_counterparties_reporting'=='True']</p> <p>At jurisdiction level:</p> <p><u>Absolute results:</u> Sum of the values of the results at counterparties pair level, where entity responsible for reporting pertains to a given jurisdiction</p> <p><u>Percentage results:</u> Sum of the values of the results at counterparties pair level, where entity responsible for reporting pertains to a given jurisdiction / sum of all outstanding SFTs submitted to reconciliation</p> | TSR | Absolute and percentage number at EU level | Pairing Under/over reporting | 2- Misreporting by one of the CPs/ERRs |

| No | Test | Description | Dataset | ESMA output | Problems addressed | Non-compliance |
|----|----------|---|---------|--|--------------------|--|
| 2B | Matching | <p>Number on outstanding unmatched SFTs.</p> <p>At counterparty level (aggregated at a level of entities responsible for reporting)::</p> <p><u>Absolute results</u></p> <p>[Number of outstanding SFTs for which Loan_reconciliation_status=='False']</p> <p><u>Percentage results</u></p> <p>[Number of outstanding SFTs for which Loan_reconciliation_status=='False']/number of outstanding SFTs for which Both_counterparties_reporting=='True'</p> <p>At jurisdiction level:</p> <p><u>Absolute results</u></p> <p>Sum of the values of the results at counterparties pair level, where entity responsible for reporting pertains to a given jurisdiction</p> <p><u>Percentage results</u></p> <p>Sum of the values of the results at counterparties pair level, where entity responsible for reporting pertains to a given jurisdiction/ Sum of all outstanding UTIs where counterparty from a given jurisdiction is CP1</p> | TSR | Absolute and percentage number at EU level | Matching | 2- Misreporting by one of the CPs/ERRs |

| No | Test | Description | Dataset | ESMA output | Problems addressed | Non-compliance |
|----|---------------------|--|---------|--|--------------------|-------------------------------------|
| 2C | Matching collateral | <p>Number on outstanding unmatched SFTs.</p> <p>At counterparty level (aggregated at a level of entities responsible for reporting):</p> <p><u>Absolute results</u></p> <p>[Number of outstanding SFTs for which Collateral_reconciliation_status=='False']</p> <p><u>Percentage results</u></p> <p>[Number of outstanding SFTs for which Collateral_reconciliation_status=='False']/number of outstanding SFTs for which Both_counterparties_reporting=='True'</p> <p>At jurisdiction level:</p> <p><u>Absolute results</u></p> <p>Sum of the values of the results at counterparties pair level, where entity responsible for reporting pertains to a given jurisdiction</p> <p><u>Percentage results</u></p> <p>Sum of the values of the results at counterparties pair level, where entity responsible for reporting pertains to a given jurisdiction/ Sum of all outstanding UTIs where counterparty from a given jurisdiction is CP1</p> | TSR | Absolute and percentage number at EU level | Matching | Misreporting by one of the CPs/ERRs |

| No | Test | Description | Dataset | ESMA output | Problems addressed | Non-compliance |
|----|--------------------|---|-------------|--|------------------------|--|
| 2D | Consistent margins | <p>A difference in the total value of margins posted and received between a given pair of counterparties as reported by the two sides. Only outstanding cleared SFTs should be evaluated. At counterparty level (aggregated at a level of entities responsible for reporting):</p> <p><u>Absolute results:</u> [Sum of the value of initial and/or variation margin received by CP1 where CP2 is the other counterparty] - [Sum of the value of initial and/or variation margin posted by CP2 where CP1 is the other counterparty]</p> <p><u>Percentage results:</u> [Sum of the value of initial and/or variation margin received by CP1 where CP2 is the other counterparty] - [Sum of the value of initial and/or variation margin posted by CP2 where CP1 is the other counterparty] / [Sum of the value of initial and/or variation margin received by CP1 where CP2 is the other counterparty]</p> <p>At jurisdiction level:</p> <p><u>Absolute results:</u> Sum of the absolute values of the absolute results at counterparties pair level, where entity responsible for reporting pertains to a given jurisdiction</p> <p><u>Percentage results:</u> Sum of the absolute values of the absolute results at counterparties pair level, where entity responsible for reporting pertains to a given jurisdiction / [sum of all initial and/or variation margin received by CP1]</p> | Margins TSR | Absolute and percentage number at EU level | Inconsistent reporting | 2- Misreporting by one of the CPs/ERRs |

| No | Test | Description | Dataset | ESMA output | Problems addressed | Non-compliance |
|----|------------|---|---------|--|--------------------|-----------------------------|
| 3A | Rejections | <p>Number of rejected reports in the previous month</p> <p>At counterparty level (aggregated at a level of entities responsible for reporting):</p> <p>Absolute results:</p> <p>[Number of rejections per month]</p> <p>Percentage results</p> <p>[Number of rejections per month] / [Number of submissions per month]</p> <p>At jurisdiction level:</p> <p>Absolute results:</p> <p>Sum of the values of the results at counterparty level, where entity responsible for reporting pertains to a given jurisdiction</p> <p>Percentage results:</p> <p>Sum of the values of the results at counterparty level, where entity responsible for reporting pertains to a given jurisdiction / sum of all submitted reports</p> | REJ | Absolute and percentage number at EU level | Rejections | 1- Misreporting by CP1/ERR1 |

| No | Test | Description | Dataset | ESMA output | Problems addressed | Non-compliance |
|----|--------------|--|---------|--|--------------------|-----------------------------|
| 4A | Late reports | <p>Number of late reports in the previous month</p> <p>At counterparty level (aggregated at a level of entities responsible for reporting):</p> <p>Absolute results</p> <p>[Number of reports where action type is not 'Error' ('EROR') made by a given counterparty in the previous month, where the difference between the reporting timestamp and event date is higher than 1 day (accounting for weekends, target calendar and national holidays)]</p> <p>Percentage results</p> <p>[Number of reports where action type is not 'Error' ('EROR') made by a given counterparty in the previous month, where the difference between the reporting timestamp and event date is higher than 1 day (accounting for weekends, Target calendar and national holidays)] / total number of where action type is not 'Error' ('EROR')</p> <p>At jurisdiction level:</p> <p>Absolute results</p> <p>Sum of the values of the results at counterparty level, where entity responsible for reporting pertains to a given jurisdiction</p> <p>Percentage results</p> <p>Sum of the values of the results at counterparty pair level, where entity responsible for reporting pertains to a given jurisdiction / Total number of reports where action type is not 'Error' ('EROR')</p> | TAR | Absolute and percentage number at EU level | Timelines | 1- Misreporting by CP1/ERR1 |

| No | Test | Description | Dataset | ESMA output | Problems addressed | Non-compliance |
|----|----------------------|--|---------|--|----------------------|-----------------------------|
| 5A | Missing Market Value | <p>Number of securities lending transactions with missing market value. Transactions executed on T and T-1 should be excluded. At counterparty level (aggregated at a level of entities responsible for reporting):</p> <p>Absolute results [Number of securities lending transactions where market value is blank or equal to zero]</p> <p>Percentage results: [Number of securities lending transactions where market value is blank or equal to zero] / Number of outstanding securities lending transactions</p> <p>At jurisdiction level:</p> <p>Absolute results: Sum of the values of the results at counterparty level, where entity responsible for reporting pertains to a given jurisdiction</p> <p>Percentage results: Sum of the values of the results at counterparty level, where entity responsible for reporting pertains to a given jurisdiction / Number of securities lending transactions</p> | TSR | Absolute and percentage number at EU level | Incomplete reporting | 1- Misreporting by CP1/ERR1 |

| No | Test | Description | Dataset | ESMA output | Problems addressed | Non-compliance |
|----|---------------------|--|-------------|--|--|----------------------------|
| 5B | Outdated valuations | <p>Number of securities lending transactions with outdated valuation.</p> <p>At counterparty level (aggregated at a level of entities responsible for reporting)::</p> <p>Absolute results [Number of securities lending transactions that are outstanding at the end of the month (day T) where valuation update was not submitted for more than one working day (i.e. no valuation was submitted on T, T-1 or T-2, based on the event date), accounting for weekends, target calendar and national holidays]</p> <p>Percentage results [Number of securities lending transactions that are outstanding at the end of the month (day T) where valuation update was not submitted for more than one working day (i.e. no valuation was submitted on T, T-1 or T-2, based on the event date), accounting for weekends, target calendar and national holidays]/[Number of securities lending transactions that are outstanding at the end of the month]</p> <p>At jurisdiction level:</p> <p>Absolute results Sum of the values of the results at level of entities responsible for the report</p> <p>Percentage results Sum of the values of the results at level of entities responsible for the report / Total number of securities lending transactions that are outstanding at the end of the month</p> | TAR and TSR | Absolute and percentage number at EU level | Dead trades Non-reporting of valuations | 1 Misreporting by CP1/ERR1 |

| No | Test | Description | Dataset | ESMA output | Problems addressed | Non-compliance |
|----|---------------------------------|---|---------|--|----------------------|-----------------------------|
| 6A | Missing collateral Market Value | <p>Number of SFTs with missing collateral market value.</p> <p>At counterparty level (aggregated at a level of entities responsible for reporting):</p> <p>Absolute results [Number of SFTs where collateral market value is blank or equal to zero]</p> <p>Percentage results [Number of SFTs where collateral market value is blank or equal to zero] / Number of outstanding SFTs</p> <p>SFTs flagged as uncollateralised should be excluded from this test</p> <p>At jurisdiction level:</p> <p>Absolute results Sum of the values of the results at counterparty level, where entity responsible for reporting pertains to a given jurisdiction</p> <p>Percentage results Sum of the values of the results at counterparty level, where entity responsible for reporting pertains to a given jurisdiction / Total number of outstanding SFTs</p> | TSR | Absolute and percentage number at EU level | Incomplete reporting | 1- Misreporting by CP1/ERR1 |

| No | Test | Description | Dataset | ESMA output | Problems addressed | Non-compliance |
|----|-------------|---|-------------|--|----------------------|---------------------------|
| 6B | –Missing VM | <p>Number of outstanding cleared SFTs with missing variation margin. Transactions executed on T and T-1 should be excluded. At counterparty level (aggregated at a level of entities responsible for reporting):</p> <p>Absolute results [Number of outstanding cleared SFTs where both variation margin posted and variation margin received are blank or equal to zero]</p> <p>Percentage results [Number of outstanding cleared SFTs where both variation margin posted and variation margin received are blank or equal to zero]/Number of outstanding cleared SFTs</p> <p>At jurisdiction level:</p> <p>Absolute results Sum of the values of the results at counterparty level, where entity responsible for reporting pertains to a given jurisdiction.</p> <p>Percentage results Sum of the values of the results at counterparty level, where entity responsible for reporting pertains to a given jurisdiction /Total number of outstanding cleared SFTs Number</p> | Margins TSR | Absolute and percentage number at EU level | Incomplete reporting | 3- Potential Misreporting |

| No | Test | Description | Dataset | ESMA output | Problems addressed | Non-compliance |
|----|------------------------------|--|---------|--|-------------------------------------|----------------------------|
| 7A | Blank/abnormal maturity date | <p>Number of outstanding SFTs with blank/abnormal maturity date - for non-open-term transactions that are securities or commodities lending or securities or commodities borrowing, buy-sell back transaction or sell-buy back transaction or repurchase transaction. Other SFTs should be excluded from the calculations (for percentage results: both in numerator and denominator)</p> <p>At counterparty level (aggregated at a level of entities responsible for reporting):</p> <p>Absolute results: [Number of outstanding SFTs where maturity date is blank or where the difference between the execution timestamp and the maturity date is more than 5 years]</p> <p>Percentage results [Number of outstanding SFTs where maturity date is blank or where the difference between the execution timestamp and the maturity date is more than 51 years]/Number of outstanding SFTs</p> <p>At jurisdiction level:</p> <p>Absolute results Sum of the values of the results at counterparty level, where entity responsible for reporting pertains to a given jurisdiction</p> <p>Percentage results Sum of the values of the results at level of entities responsible for the report / Total number of outstanding SFTs</p> | TSR | Absolute and percentage number at EU level | Incomplete reporting Dead Trades | 1-Misreporting by CP1/ERR1 |

| No | Test | Description | Dataset | ESMA output | Problems addressed | Non-compliance |
|----|-------------|---|---------|--|--------------------|---------------------------|
| 8A | Lack of LEI | <p>Number of SFTs with client code and a high value. At counterparty level (aggregated at a level of entities responsible for reporting):</p> <p><u>Absolute results</u> [Number of outstanding SFTs where other counterparty is identified with a client code and: Repos: Principal amount on value date (2.37) > 1 million EUR BSB: Principal amount on value date (2.37) > 1 million EUR SLB: Loan Value (2.56) > 5 million EUR, or SLB: Market value (2.57) > 5 million EUR ML: Outstanding margin loan (2.69,) or Short market value (2.71)] > 1 million EUR</p> <p><u>Percentage results</u> [Number of outstanding SFTs where other counterparty is identified with a client code and any of thresholds are exceeded]/ number of outstanding SFTs At jurisdiction level: <u>Absolute results</u> Sum of the values of the results at counterparty level, where entity responsible for reporting pertains to a given jurisdiction <u>Percentage results</u> Sum of the values of the results at counterparty level, where entity responsible for reporting pertains to a given jurisdiction /Total number of outstanding SFTs</p> | TSR | Absolute and percentage number at EU level | LEI Pairing | 3- Potential misreporting |

| No | Test | Description | Dataset | ESMA output | Problems addressed | Non-compliance |
|----|-----------------------|---|---------|---|----------------------|-----------------------------|
| 8B | Missing LEI of issuer | <p>Number of SFTs with EEA and non-EEA ISIN without a corresponding LEI of the issuer.</p> <p>At counterparty level (aggregated at a level of entities responsible for reporting):</p> <p>Absolute results:</p> <p>(i) Number of outstanding SFTs with populated securities identifiers where securities identifier is or is not in EEA with missing LEI of the issuer.</p> <p>(ii) Number of unique securities identified in outstanding SFTs with populated securities identifiers where securities identifier is or is not in EEA with missing LEI of the issuer</p> <p>(iii) Number of unique issuers pertaining to the securities identified in outstanding SFTs with populated securities identifiers where securities identifier is or is not in EEA with missing LEI of the issuer</p> <p>Percentage results:</p> <p>(i) Number of outstanding SFTs with populated securities identifiers where securities identifier is or is not in EEA with missing LEI of the issuer. / Number of outstanding SFTs</p> <p>(ii) Number of unique securities identified in outstanding SFTs with populated securities identifiers where securities identifier is or is not in EEA with missing LEI of the issuer / Number of all unique securities identified in outstanding SFTs</p> <p>(iii) Number of unique issuers pertaining to the securities identified in outstanding SFTs with populated securities identifiers where securities identifier is or is not in EEA with missing LEI of the issuer / Number of all unique issuers pertaining to the securities identified in outstanding SFTs</p> <p>At jurisdiction level:</p> | TSR | Absolute and percentage number at EU level Split by EEA vs non EEA issuers | Incomplete reporting | 1- Misreporting by CP1/ERR1 |

| No | Test | Description | Dataset | ESMA output | Problems addressed | Non-compliance |
|----|----------------------------------|--|---------|--|------------------------|-----------------------------|
| | | Absolute results: Sum of the values of the results at counterparty level, where entity responsible for reporting pertains to a given jurisdiction Percentage results: Sum of the values of the results at counterparty pair level, where entity responsible for reporting pertains to a given jurisdiction / [Total number of outstanding SFTs] | | | | |
| 9A | Entity responsible for reporting | Number of outstanding SFTs with incorrect ERR. The following cases should be classified as incorrect: -CP1 is a FC other than UCITS or AIF and the ERR is different from CP1 - CP1 is UCITS or AIF and the ERR is same as CP1 Absolute results [Number of outstanding SFTs with incorrect ERR] Percentage results [Number of outstanding SFTs with incorrect ERR/ number of outstanding SFTs] At jurisdiction level: Absolute results Sum of the results at counterparty level, where counterparty from a given jurisdiction is CP1 Percentage results | TSR | Absolute and percentage number at EU level | Inconsistent reporting | 1- Misreporting by CP1/ERR1 |

| No | Test | Description | Dataset | ESMA output | Problems addressed | Non-compliance |
|------|---------------------|--|---------|--|------------------------|-----------------------------|
| | | Sum of the results at counterparty level, where counterparty from a given jurisdiction is CP1/Total number of outstanding SFTs, where counterparty from a given jurisdiction is CP1 | | | | |
| 10 A | Counterparty nature | Number of outstanding SFTs with inconsistent counterparty nature (field 1.4) At counterparty level (aggregated at a level of entities responsible for reporting): Absolute results [Variation ratio x number of outstanding SFTs, where variation ratio is proportion of cases that are not in the mode3. This is equivalent to the number of outstanding SFTs for which the reported counterparty nature is not in the mode] Percentage results Variation ratio At jurisdiction level: Absolute results Sum of the values of the results at counterparty level, where entity responsible for reporting pertains to a given jurisdiction Percentage results: | TSR | Absolute and percentage number at EU level | Inconsistent reporting | 1- Misreporting by CP1/ERR1 |

| No | Test | Description | Dataset | ESMA output | Problems addressed | Non-compliance |
|----|------|--|---------|-------------|--------------------|----------------|
| | | Sum of the values of the results at counterparty level, where entity responsible for reporting pertains to a given jurisdiction /Total number of outstanding SFTs | | | | |

| No | Test | Description | Dataset | ESMA output | Problems addressed | Non-compliance |
|-----|------------------|---|---------|--|------------------------|-----------------------------|
| 10B | Corporate sector | <p>Number of outstanding SFTs with inconsistent corporate sector (field 1.5)</p> <p>At counterparty level (aggregated at a level of entities responsible for reporting):</p> <p>Absolute results</p> <p>[Variation ratio x number of outstanding SFTs, where variation ratio is proportion of cases that are not in the mode . This is equivalent to the number of outstanding SFTs for which the reported counterparty sector is not in the mode]</p> <p>Percentage results</p> <p>Variation ratio</p> <p>At jurisdiction level:</p> <p>Absolute results</p> <p>Sum of the values of the results at counterparty level, where entity responsible for reporting pertains to a given jurisdiction</p> <p>Percentage results:</p> <p>Sum of the values of the results at counterparty level, where entity responsible for reporting pertains to a given jurisdiction</p> <p>/Total number of outstanding SFTs</p> | TSR | Absolute and percentage number at EU level | Inconsistent reporting | 2- Misreporting by CP1/ERR1 |

| No | Test | Description | Dataset | ESMA output | Problems addressed | Non-compliance |
|-----|-----------|---|---------|---|--------------------|--------------------------|
| 11A | Anomalies | <p>Abnormal/anomalous values identified using statistical (non-parametric approaches such as: min, max, standard deviation etc.) and machine learning algorithms. Expert judgement is applied to sense check identified occurrences before they are being distributed to CAs.</p> <p>At counterparty level (aggregated at a level of entities responsible for reporting):</p> <p>Absolute results</p> <p>[Number of outstanding transactions where outlier is identified in any of the following fields or ratios between relevant fields:</p> <p>Fixed rate (2.23), Spread (2.32), Principal amount on value date (2.37), , Principal amount on maturity</p> <p>date (2.38), Loan Value (2.56), Market value (2.57), Lending Fee (2.67), Outstanding margin loan (2.69), Short market value (2.71), Cash collateral amount (2.76), Collateral quantity or nominal amount (2.83), Collateral market value (2.88), Haircut or margin (2.89), Initial margin posted (3.8), Variation margin posted (3.10), Excess collateral posted (3.16), Value of reused collateral (4.8), Estimated reuse of collateral (4.9), Reinvestment rate (4.11),</p> <p>Reinvested cash amount (4.13),</p> <p>Percentage results</p> <p>[Number of outstanding transactions where outlier is identified in any of the aforementioned fields]/[Number of outstanding SFTs]</p> | TSR | Absolute and percentage number at EU level Split by EEA vs non EEA issuers | Anomalies | 3-Potential misreporting |

| No | Test | Description | Dataset | ESMA output | Problems addressed | Non-compliance |
|----|------|---|---------|-------------|--------------------|----------------|
| | | At jurisdiction level: Absolute results Sum of the values of the results at counterparty level, where entity responsible for reporting pertains to a given jurisdiction Percentage results Sum of the values of the results at counterparty level, where entity responsible for reporting pertains to a given jurisdiction /Total number of outstanding transactions | | | | |

| No | Test | Description | Dataset | ESMA output | Problems addressed | Non-compliance |
|-----|-------------------|---|---------|--|---------------------|-----------------------------|
| 12A | Duplicate reports | Number of duplicated outstanding SFTs At counterparty level (aggregated at a level of entities responsible for reporting): Absolute results [Number of outstanding SFTs with the same triplet CP1-CP2-UTI] Percentage results [Number of outstanding SFTs with the same triplet CP1-CP2-UTI]/ number of outstanding SFTs At jurisdiction level: Absolute results Sum of the values of the results at counterparty level, where entity responsible for reporting pertains to a given jurisdiction Percentage results Sum of the values of the results at counterparty level, where entity responsible for reporting pertains to a given jurisdiction /Total number of outstanding SFTs | TSR | Absolute and percentage number at EU level | Duplicate reporting | 1- Misreporting by CP1/ERR1 |

| No | Test | Description | Dataset | ESMA output | Problems addressed | Non-compliance |
|-----|------------------------|--|---------|--|--------------------------------------|-----------------------------|
| 13A | Not updated event date | <p>Number of outstanding SFTs with not updated event date At counterparty level aggregated at a level of entities responsible for reporting:</p> <p>Absolute results</p> <p>Number of outstanding SFTs where event date is earlier than test date 2 (accounting for weekends, target calendar and national holidays)</p> <p>Percentage results</p> <p>Number of outstanding SFTs where event date is earlier than test date 2 (accounting for weekends, target calendar and national holidays)/Number of outstanding SFTs at jurisdictional level:</p> <p>Absolute results</p> <p>Sum of the results at counterparty level, where counterparty from a given jurisdiction is CP1</p> <p>Percentage results</p> <p>Sum of the results at counterparty level, where counterparty from a given jurisdiction is CP1/Total number of outstanding SFTs, where counterparty from a given jurisdiction is CP1</p> | TSR | Absolute and percentage number at EU level | Late reporting, incomplete reporting | 1- Misreporting by CP1/ERR1 |

3 Frequency of calculations

6. The calculation of the data quality indicators should be performed on a monthly basis.
7. For the calculation of the indicators based on Trade State Report (TSR) data, the TSR of a single working day in a given month should be used³.
8. For the calculation of the indicators based on Trade Activity Report (TAR) data, all TAR reports from a given month should be used. Therefore, such indicators will present cumulative results from a given month.

4 National holidays

9. In addition to weekends and Target calendar holidays, also the national holidays should be taken into account where relevant for the test results (as per the specifications of the tests).

The list of national holidays for a given calendar year should be provided to ESMA by the NCA by the end of the previous year, either by providing a file listing all the holidays or by providing a link to an official source from which such information can be retrieved.

³ The TSR of the last working day in the given month.