Final Report and Guidelines
on calculation of positions in SFTs by Trade Repositories

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1 Legislative references, abbreviations and glossary of concepts and terms

Legislative references

**SFTR**


**EMIR**


**ESMA Regulation**


**SFTR Reporting Guidelines**

Guidelines on Reporting under Articles 4 and 12 SFTR SFTR⁴

**Guidelines on position calculation (EMIR)**

Guidelines on position calculation by trade repositories under EMIR⁵

**RTS on data aggregation**

Commission Delegated Regulation (EU) 2019/358 of 13 December 2018 supplementing Regulation (EU) 2015/2365 of the European Parliament and of the Council with regard to regulatory technical standards on the collection, verification, aggregation, comparison and publication of data on securities financing transactions (SFTs) by trade repositories⁶

**RTS on reporting**


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¹ OJ L 337, 23.12.2015, p. 1
² OJ L 201, 27.7.2012, p. 1
³ OJ L 331, 15.12.2010, p. 84.
⁶ OJ L 81, 22.3.2019, p. 30
regulatory technical standards specifying the details of securities financing transactions (SFTs) to be reported to trade repositories.

**ITS on reporting**

**RTS on registration**

**RTS on data access**

**Abbreviations**

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Description</th>
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<tbody>
<tr>
<td>CP</td>
<td>Consultation Paper</td>
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<tr>
<td>ECB</td>
<td>European Central Bank</td>
</tr>
<tr>
<td>EEA</td>
<td>European Economic Area</td>
</tr>
<tr>
<td>ESMA</td>
<td>European Securities and Markets Authority</td>
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<tr>
<td>EU</td>
<td>European Union</td>
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</tbody>
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7 OJ L 81, 22.3.2019, p. 1
8 OJ L 81, 22.3.2019, p. 85
9 OJ L 81, 22.3.2019, p. 45
10 OJ L 81, 22.3.2019, p. 22
<table>
<thead>
<tr>
<th>Acronym</th>
<th>Description</th>
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<tbody>
<tr>
<td>FSB</td>
<td>Financial Stability Board</td>
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<tr>
<td>ISO</td>
<td>International Organization for Standardization</td>
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<td>ITS</td>
<td>Implementing Technical Standards</td>
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<tr>
<td>LEI</td>
<td>Legal Entity Identifier</td>
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<tr>
<td>MIC</td>
<td>Market Identifier Code</td>
</tr>
<tr>
<td>NCA</td>
<td>National Competent Authority</td>
</tr>
<tr>
<td>NCB</td>
<td>National Central Bank</td>
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<tr>
<td>Q&amp;A</td>
<td>Questions and Answers</td>
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<tr>
<td>RTS</td>
<td>Regulatory Technical Standards</td>
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<tr>
<td>SFTP</td>
<td>SSH File Transfer Protocol</td>
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<tr>
<td>SLA</td>
<td>Service Level Agreement</td>
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<tr>
<td>TR</td>
<td>Trade Repository</td>
</tr>
<tr>
<td>TRACE</td>
<td>System for single access to TR data</td>
</tr>
<tr>
<td>XML</td>
<td>Extensible Mark-up Language</td>
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</table>
Glossary of concepts and terms

1. “Positions” means the representation of exposures between a pair of counterparties that comprise the following sets defined under Named positions (Overview report, Loan Position Set, Collateral Position Set, Margin Set and Reuse Set) and pre-aggregated positions for FSB reporting\(^\text{11}\).

2. “Outstanding SFTs” means those SFTs that have not matured or which have not been the subject of reports with action types ‘Error’, ‘Termination/Early termination’, or ‘Position component’ as referred to in Field 98 of Table 2 of Annex I to ITS on reporting.

3. “Variables” are those values either taken directly from the SFTR reporting fields or derived from those fields that will be used by TRs to calculate positions.

4. “Authority” means one of the entities referred to in Article 12(2) of SFTR.

5. “Metrics” are variables used to quantify the different calculations. The fields used to define metrics (and dimensions) follow the nomenclature as per the RTS and ITS on reporting. For instance, T1F17 means field 17 of table 1.

6. “Dimensions” are variables related to SFTs that are used to group SFTs together into positions.

7. “Reference Date” means the date the calculation refers to.

\(^{11}\) While these latter set of positions have finally been dropped from the Guidelines, they were considered as part of the consultation process.
2 Executive Summary

Reasons for publication

This Final report contains (i) the assessment of the feedback received from stakeholders on the Consultation Paper (CP)\(^{12}\) on draft Guidelines on calculation of SFT positions, and explains how ESMA took this feedback into account, (ii) the cost-benefit analysis; (iii) the advice of the Securities and Markets Stakeholder Group (SMSG) and (iv) the final set of Guidelines.

The Guidelines included in the Annex to this final report provide clarification with regards to the compliance with Article 12(2) of SFTR, requiring TRs to collect and maintain details of SFTs, Article 80(4) of EMIR as referred to in 5(2) of SFTR, setting out a general requirement for TRs to calculate positions, and Article 5 of RTS on data aggregation which specifically requires TRs to calculate positions in SFTs in a harmonised and consistent manner. High-quality position data is necessary for the assessment of systemic risks to financial stability by the relevant authorities.

Contents

An overview of the responses to the proposals in the CP, together with the detailed ESMA feedback is outlined in Section 3.

More specifically:

- As regards the introductory statements, ESMA decided to postpone the application date of the Guidelines, so as to leave sufficient time for TRs to reach compliance with the Guidelines. ESMA was also receptive of the comments related to FSB reporting, as detailed in Section 3.3.

- Section 3.1. relates to the feedback concerning the general aspects of position calculations. ESMA took note of the need to continue interacting with TRs on certain aspects, such as the representation of SFT exposures, calculation algorithms and outliers detection methodology. ESMA modified Guideline 3 to allow for the inclusion of SFT reports missing one of the required metrics or position in the calculations. ESMA included in Guidelines 4 and 13 some clarification requested by respondents, on outliers detection and on treatment of negative values respectively. ESMA also specified in a new Guideline 6 how re-running of calculation would work in case of portability.

- Section 3.2. concerns the feedback to the named positions calculations. ESMA has assessed all suggestions on the exclusion of certain fields from the list of metrics and dimensions. ESMA considered to mostly maintain the respective lists as proposed in the CP, with some exceptions: (i) deletion of portfolio code aggregation; (ii) inclusion of a new volume metrics (Field 2.83); (iii) inclusion of a new metric in the Overview report (Field 2.56); (iv) deletion of aggregation by “country of the other counterparty”; (v) inclusion of a new jurisdiction bucket (bucket (f)) in Guideline 17. Following some

requests for clarifications, ESMA: (i) amended Guideline 15, explaining what “original currency” meant; (ii) amended Guideline 23, specifying how TRs should proceed when receiving both sides of the SFT transaction.

- Section 3.3. summarises responses on FSB reporting. In light of the opinions expressed by respondents, ESMA decided to put on hold the provision of guidance on FSB reporting, and to consider issuing it at a later stage. The Section thus explains which arguments supported this decision, and shortly assesses the inputs received on specific reporting aspects.

The cost-benefit analysis is set in Section 4.

A reference to the advice of the SMSG is set in Section 5.

The Guidelines are included in the Annex.

Next steps
ESMA will publish the Final report and the Guidelines on the ESMA’s website. The Guidelines will be translated in all the official languages of the European Union.
3 Summary of feedback received to public consultation

8. This Section provides a summary of the responses to the CP on the proposed draft “Guidelines on calculation of positions in SFTs by Trade Repositories”.

9. The CP contained 27 questions covering all aspects of the draft Guidelines.

10. The consultation ran from 9 July to 15 September 2020. ESMA received 6 responses. Respondents included 4 TRs, one trade association and one financial services provider.

11. The summary of feedback below follows the order of the Questions as they were presented in the CP.

12. On this specific aspect, ESMA cooperated closely with the ECB project team working on SFT data collection, both when drafting the CP and subsequently, when elaborating the final set of Guidelines.

Q1. Do you agree with the proposed approach to implementation? Please elaborate on the reasons for your response.

13. In the CP ESMA proposed the establishment of two set of positions: named positions and sectorial or FSB positions.

14. Four respondents answered this question.

15. Two TRs asked for delaying the application date of the Guidelines.

16. ESMA has postponed the application date to 31 January 2022, so as to allow for a sufficient time to reach compliance with the Guidelines by TRs.

17. One trade association suggested that the FSB template should be used for both named positions and sectoral reporting. The same trade association also questioned the need for TRs to report to FSB, given that ECB already generates reports to FSB on behalf of EU member states. In this regard ESMA recalls that ECB’s Securities Financing Transaction Data Store project (SFTDS) does not generate reports on behalf of EU member states, but rather facilitates FSB reporting for seven national central banks which take part to the project.

18. As explained in Section 3.3 below, although ESMA initially consider to provide guidance on FSB reporting as part of the set of Guidelines, after assessing the costs and benefits, ESMA decided not to provide guidance on it for the time being.
3.1 General aspects

Q2. Do you foresee any additional option, that would represent SFT exposures more accurately? Please detail the reasons for your response.

19. In the CP ESMA proposed that the SFTs should be included in the aggregate positions from the moment they are reported, regardless of settlement and value date.

20. Five respondents answered this question.

21. Two TRs and a financial service provider supported the proposed methodology. One of them suggested to include examples for every type of instrument in the Guidelines. The financial service provider suggested to perform tests on production data to assess which data would be most relevant for position aggregation.

22. ESMA will consider the need to issue additional guidance should TRs encounter difficulties in representing exposures for certain types of instruments. In a similar fashion, fine tuning on the production dataset might be considered in the future.

23. One trade association, while not disagreeing with the proposal, observed that this methodology does not well represent the change of direction in counterparty risk before and after settlement, and to use post-settlement data instead.

24. While agreeing with the merits of this last comment, ESMA believes that the use of post-settlement data would raise data quality issues related to settlement failures or delays, and would be complex for TRs to implement. It is therefore considered to proceed as proposed in the CP.

Q3. Is there any additional aspect that needs to be clarified with regards to the timeline for provision of position data? Please detail the reasons for your response.

25. In the CP ESMA proposed that position data calculations should be based on the most recent full day’s set of trade state data, and be updated on each business day.

26. Five respondents answered this question.

27. One TR suggested to use reporting timestamp instead of event date, which could be misleading, and to determine the FX rate with reference to the last reported value rather than by reference to the relevant submission.

28. However, ESMA believes that in the event of a crisis authorities would need to have access to the most recently available data on potential exposure. Moreover, reporting on T+1 is in line with the SFTR Reporting Guidelines.

29. The same TR observed that reference to fields 57 and 88 is not correct because these fields are only applicable to certain product types (2.57 only applicable to SL, 2.88 only to COMM and SECU collateral types) and asked for clarifications on how the calculation should be done for the others.
30. In this regard, ESMA recalls that position data calculation should be based on the dimensions set out, per each SFT type, in Guideline 16.

31. One market association and one TR asked for clarifications on the meaning of “intended settlement date” in paragraph 25 of the CP. In this regard, ESMA clarifies that the term should be understood as the agreed settlement date, within the meaning of Field 2.13 of the RTS on reporting.

32. One TR suggested to align the deadline for making available position calculation to Paragraph 6.3.1. of the SFTR functional specifications document (i.e. by 12:00 UTC of the day of data query execution).

33. The same TR proposed that calculations should be based, instead of on Event date, on the most recent state of data at the end of the day T+1, to be included it in the report to be delivered in T+2. ESMA recalls that the trade state of each SFT as calculated by the TRs should represent its most-up-to-date state, subject to the correct reporting by counterparties, report submitting entities and entities responsible for reporting. Moreover, further to the clarifications in the Guidelines on reporting, SFTR Q&A 7 and 8 provide additional guidance in this regard.

34. Therefore, to the extent that reporting is carried out correctly, ESMA considers that all the TRs should obtain comparable outcomes for SFT positions.

35. One TR, one market association and one financial service provider suggested that the deadlines for reporting counterparties’ submission to TRs should refer to UTC rather than to local time. This would avoid discrepancies related to the fact that the deadlines for reporting by counterparties to TRs are in UTC. In this regard, ESMA recalls that counterparties should follow their local time for determining the deadline for reporting to TRs, as clarified in SFTR Q&A 1. It is, however, worth mentioning that reporting deadlines for TRs stay in UTC. For these reasons, ESMA has not followed this suggestion.

Q4. How should we consider the inclusion of SFTs in positions, when due to timezone difference, an SFT cannot be included in a position calculation for Event date T and it is reported on T+1? Please detail the reasons for your response.

36. ESMA asked respondents to express their views on the inclusion of SFTs positions in the scenario described in Question 4.

37. Three respondents answered this question.

38. One TR argued that the position should be calculated by reference to the trade state produced for a position by the relevant TR, since, as the reporting obligation does not require firms to report until T+1, this is likely to be a common scenario. This would ensure that regardless of the event date or time zone under which the trade is reported, the resulting position is based on the given trade state.

39. ESMA considers this remark to be in line with the proposed Guideline 1 and with the Event date logic set in the SFTR Reporting Guidelines, and that therefore no clarification is necessary in this regard.

40. Two TRs proposed to show the positions calculations over the outstanding trades at the end of each business day, and to calculate positions following the proposed Guideline 2. Reports received on T+2 due to the time zone difference could be included in position calculation reported in T+3.

41. ESMA understands the impossibilities for TRs to calculate positions correctly if the counterparties have not reported correctly (i.e. it is in accordance with the validation rules, but not accurate) the data relating to their outstanding SFTs. As the TRs are receivers of the data and not the ones that generate it, this aspect should thus be taken into account by data users when performing their analysis.

Q5. Do you agree with the proposed approach for calculating positions and excluding SFTs which are missing one of the required metrics and dimensions? Alternatively, could you consider any of the proposed alternatives or propose some additional ways to calculate the SFT positions? Please detail the reasons for your response.

42. ESMA proposed that TRs should exclude from their position calculations those reports that, while in line with validation rules, miss data for fields that are metrics or dimensions, and asked respondents their opinion on possible alternative solutions.

43. Five respondents answered this question.

44. Three TRs agreed with the proposed approach, mentioning that this is aligned with the EMIR one.

45. One trade association and one TR observed that the proposed approach which simply excludes incomplete reports from the position calculation might provide misleading results. The alternative option (a) (inclusion of an “NA” category for missing data) would be best suited to overcome this problem, and straightforward to implement.

46. ESMA concurred with this last comment, and modified Guideline 3 in the sense that SFTs with missing data should be included in a separate position. However, ESMA considered that dimensions “Reporting counterparty”, “Other counterparty” and “Type of SFT” as critical elements to obtain meaningful data. SFTs missing data for these dimensions should therefore be excluded from all calculations.

Q6. Do you agree with the establishment of a process for identification of outliers by the TRs? Please detail the reasons for your response.

47. ESMA proposed that TRs should establish a procedure for the identification of abnormal values (i.e. outliers). Each given position should then be calculated both excluding reports with outliers and including them.
48. One TR and one trade association disagreed with this proposal, arguing that having two sets of reports would be redundant.

49. Three TRs and one trade association argued in favour of more specific guidance, in particular on the definition of outlier. They also suggested some alternative approaches: (i) ESMA to define these outliers’ identification standards as part of the final guidelines; (ii) allow TRs to define outliers’ identification standards via mutual agreement or collaboratively with ESMA.

50. A financial market service provider and a TR agreed with the proposal, and suggested that the definition of outlier would be defined more precisely based on the production data observations over a significant period.

51. While acknowledging the need for specific guidance on outliers’ definition and detection methodology, ESMA believes that, given the variety and complexity of SFTs, a precise and effective definition could only be established after gathering a significant volume of data.

52. Another TR suggested that instead of producing two sets of aggregate positions, data excluded by each TR should be reported to ESMA through a separate outlier report.

53. ESMA agreed that the production of two separate reports would be cumbersome for TRs and would not give additional value to supervisors. A single report containing figures calculated both with and without outliers would better serve the needs of supervisors and would streamline the processes of calculation at the TRs. Guideline 4 was modified consequently.

54. ESMA clarified in Guideline 4 that outliers should be identified in absolute values, following a request received in this regard.

Q7. Do you consider that this process should be further standardised across TRs? If so, what specific aspects and statistics should be considered? Please detail the reasons for your response.

55. ESMA invited respondents to express their views on whether the outlier detection process should be further standardised.

56. Four respondents answered this question.

57. Two TR and one trade association reiterated the proposals put forward in their replies to Q6, and suggested particular caution in aggregating negative amounts, as portfolios collateralized at the net exposure level contain risk offsetting transactions and it may not always be appropriate to net across portfolios to determine expos.

58. ESMA agreed to this proposal, and modified Guideline 4 by clarifying that outliers should be identified in absolute values and included in Guideline 13 further guidance on the treatment of positive and negative values reported for collateral.

59. Another TR suggested that ESMA could launch a specific consultation on the methodology for calculation of outliers. Other aspects to be specified would be: (i) the exclusion logic,
which is based on nominal values, not specific to schema; (ii) the logic to reconcile data sets across the 4 tables annexed to the Reporting Technical Standards.

60. When assessing the need for the issuance of further guidance on this point, ESMA will duly consider this feedback, as well as analyse the data received and discuss potential changes with TRs.

Q8. **What additional aspects should be clarified with regards to the availability of algorithms for ESMA? Please detail the reasons for your response.**

61. ESMA proposed that TRs should make available to ESMA the algorithms and procedures they use to produce the data sets described in these Guidelines.

62. Four respondents answered this question.

63. One TR understands that by ‘algorithm’ the TRs are required to produce the requirements for derivation of the position data, rather than the actual code.

64. ESMA confirms this understanding.

65. Two TRs and a trade association proposed that a uniform aggregation methodology should be agreed across TRs, or that ESMA should provide TRs with the algorithms.

66. This suggestion was not taken onboard as ESMA understands that TRs receive data from different groups of market participants, hence the algorithms used at each TR might differ in order to capture the singularity of the relevant set of market participants. This being said, ESMA will continue working with the TRs in order to achieve consistent outcomes of the calculation of positions.

Q9. **Do you agree with the proposal to align the record-keeping of position calculations under SFTR with EMIR? What other aspects should be considered? Please detail the reasons for your response.**

67. With Guidelines 6 and 7 ESMA proposed to adopt for SFTR positions the same guidance provided for EMIR positions in terms of correction of erroneous calculations and record-keeping.

68. Five respondents answered this question.

69. Two TRs and a financial services provider agreed with this proposal.

70. Two TRs and a trade association argued that re-running calculations as proposed in Guideline 6 would be difficult to implement and not useful to ensure accuracy of aggregate calculations. Due to the high number of error reports received daily, by the time position calculations are re-run they would be already outdated. In this regard, one TR suggested that ESMA could consider to only ask TRs to perform the calculation again when the mistakes are statistically significant.
71. Consistently with Guideline 10 of the Guidelines on position calculation (EMIR) ESMA has decided not to introduce any threshold of statistical significance for the performance of correction calculation, so to ensure the highest possible data quality degree.

72. Two TRs asked to clarify how the process would work in case of portability, and in particular: (i) which TR would be responsible for re-running calculations; (ii) whether ported in trades should be excluded from the re-run.

73. ESMA has clarified this aspect in Guideline 6.

3.2 Named positions

Q10. Do you agree with the proposed approach to compute weighted-average prices and volumes? Do you agree with the proposed list of fields in Table 2 - Metrics for positions for the computations? Please detail the reasons for your response.

74. In the CP ESMA proposed a list of volume and price metrics, together with an approach to compute their weighted-average statistics.

75. A TR asked what attributes should be reported where the TR has both sides of the report and there are reconciliation breaks. ESMA notes that in case of reconciliation breaks TRs should follow Guideline 23. It is worth noting that this Guideline has been further amended to confirm what the TR should do also in case the data is reconciled.

76. The same TR asked how the calculation should be run in case both parties have reported, but only one is subject to the reporting obligation. ESMA has clarified this aspect in Guideline 11.

77. A TR asked clarifications on whether reported values should be treated as absolute values or by taking their signs into account. ESMA clarified this aspect in Guideline 13.

78. A trade association commented that the proposed aggregation per SFT type would be burdensome for TRs, and that repos and BSB/SBB could be part of the same aggregation. ESMA decided not to follow this suggestion. While the two classes of instruments are similar, they feature a different risk profile. Also, applicable fields are not identical, hence creating a single position would be very cumbersome.

79. The same trade association argued that there would be no need to analyse margins at the level of portfolio code. ESMA agreed with this observation, and consequently deleted portfolio code from the list of dimensions included in Table 3.

80. The trade association also observed that the calculation of exposures at counterparty side level in case of trade-based collateral would be complex because this field does not apply to COLU messages. In this regard ESMA recalls that collateral messages can be matched to the report reported as a new trade by using the UTI. This suggestion was therefore not followed.

81. Taking on board a comment from a TR, ESMA has amended Table 2 by including Field 2.56 as volume metric for the Overview report.
82. A TR proposed to include Field 2.83 as volume metric for the collateral report. ESMA agreed with this proposal and amended Table 2 accordingly.

Q11. Do you agree with including in the report the original currency of the SFTs as well as its EUR equivalent monetary values? Do you consider that a different approach to bucketing should be considered? Please detail the reasons for your response.

83. ESMA proposed that TRs should calculate positions both in the original currency and in the EUR equivalent amount.

84. One TR agreed with the proposed currency bucketing system.

85. Another TR suggested considering the spot conversion rate as of the day of the position report instead of bucketing. Since most SFTs’ master agreements feature a base currency to be used in a default scenario, a conversion based on FX rates would be more accurate in representing counterparties’ exposures.

86. Another TR argued that the use of ECB rates of the event date would cause problems in case of a mixture of different event date for the same file (e.g. if a certain file is modified and included in the position later than the event date), This problem might be avoided by using FX spot rates on the the day data is aggregated.

87. ESMA has assessed this option, but finally considered that the use of FX spot rates may result in inconsistencies for transactions in which loan and collateral side are denominated in different currencies.

88. A trade association and a data service provider asked to clarify which currency field determines what the “original currency” is.

89. ESMA has consequently amended Guideline 15, which now refers to the “currency the SFT was denominated in”.

Q12. Do you consider that the key characteristics of SFTs are covered by the proposed list of dimensions in Table 3 - Dimensions for position reports under SFTR (including the currencies of metrics)? If not, please indicate which other data fields should be considered and how those should be considered? Alternatively, do you consider that some dimensions could be excluded as they would not contribute to the better understanding of the outstanding exposures between SFTs? Please detail the reasons for your response?

90. ESMA proposed a list of dimensions (now Table 3 of the Guidelines) that TRs should use to group calculations into buckets of SFTs with a similar set of characteristics.

91. One TR and a trade association suggested excluding from the list of dimensions fields “Reporting Counterparty”, “Other counterparty”, “Trading venue”, “Tri-party agent” “Agent lender”, “Jurisdiction of the issuer” and “Portfolio code” as they would not be related to risk.
monitoring. ESMA considers all those fields relevant for monitoring purposes, and decided to retain them.

92. In this regards, another TR suggested excluding fields that are not mandatory in validation rules, i.e. “Tri-party agent”, “Agent lender” and “Price currency”. ESMA considered necessary to retain these three fields. When the tri-party and agent lender fields are not populated, the relevant SFTs need to be included in the “false” category.

93. These same respondents noticed that the requirement for TRs to classify re-use reports using information extracted from the ISIN of the security seems contradictory with the general rule that TRs shall not enrich the data they store.

94. In this regard, ESMA notices that the information TRs will be required to extract from the securities’ ISIN would not be used to enrich or alter reported data in any way, but rather to simply group calculations for aggregation purposes. There is therefore no contradiction with recordkeeping rules.

95. One TR suggested the inclusion of fields “Type of asset”, “Delivery by value”, “Maturity of security” and “Jurisdiction of the issuer” to the Loan Position Set for Securities and Commodities Lending.

96. However, while recognising certain value added in this proposal, at this stage ESMA did not include these fields as they might lead to further breakdowns of the positions, thus undermining the systemic risk monitoring purposes of the positions.

Q13. Specifically in the case of the collateralisation on net exposure basis, do you think that the TRs should create separate positions for those SFTs without considering the counterparty side? Please detail the reasons for your response?

97. Still regarding the list of dimensions, ESMA sought respondents’ feedback on the specific question on whether the TR should create separate positions for SFTs collateralised on net exposure basis.

98. One TR proposed that this separate position should only be created for the collateral report. Another TR proposed that only information received with action type “COLU” should be used for the creation of such separate position. ESMA notes that collateral could be reported also with action type “NEW”, and it should also be included in positions.

99. A trade association agreed with ESMA’s proposal. ESMA has further clarified that the calculation of collateral has to be different between transaction-level collateralisation and net exposure one.

100. A TR proposed that “Counterparty side” should not be included in this position. ESMA has clarified its proposal, as this field is necessary to identify who is the lender and who is the borrower in the case of transaction based collateral, but it is not applicable for SFTs collateralised at net basis. ESMA has clarified this aspect in Table 3 of the Guidelines.

101. ESMA considers the feedback received as generally supportive of the proposal, and decided to proceed as proposed in the draft Guidelines.
Q14. Do you agree with the proposed bucketing? Should ESMA consider an alternative approach? Please detail the reasons for your response.

102. ESMA proposed to use fields “country of the other counterparty” and “jurisdiction of the issuer” as further criteria for bucketing, and to align this aggregation to the one relating to currencies.

103. Differently from what was originally proposed, ESMA decided that only field “Jurisdiction of the issuer” should be used for bucketing. This bucketing would be sufficient for determining exposures towards a specific jurisdiction, while eliminating potential data quality issues linked to wrong population of field “Country of the other counterparty”.

104. One TR observed that field “Jurisdiction of the issuer” would not be a proxy for default risk, and suggested to discard this aggregation.

105. In this regards, ESMA observes that while the jurisdiction of the issuer is not a default risk indicator of itself, it still represents an important information for regulators to assess exposures vis-à-vis other jurisdictions, and that the relevant aggregation should therefore be retained.

106. One trade association suggested a different aggregation, featuring: (i) Eurozone and other EU countries; (ii) Other European, non EU (RU, UA, TK, IS); (iii) other advanced markets (AU, CA, HK, SG, NZ) but without CN and TW; (iv) other Asian (including TN and CN). One TR proposed to merge the “Other advanced third market” into the “Rest of the world” category.

107. In relation to the above suggestions, ESMA agrees to the inclusion of the “Other European, non-EU” aggregation, but excluded Iceland, as this country falls within the aggregation under letter a) of Guideline 17. ESMA believes that the other proposed alternative country aggregation methods would offer little additional value in terms of information for the supervisors, hence those are disregarded.

Q15. Do you agree with the proposed inclusion of tri-pary agents and agent lenders in the position reports? Please detail the reasons for your response.

108. ESMA proposed that TRs should flag the participation of a tri-party agent or agent lender in the SFT.

109. Two TRs argued that this proposal adds an additional burden for TRs, and that regulators could retrieve this information from transaction level data.

110. One data reporting service provider suggested that also fields 1.15 “Broker” and 1.17 “CSD” should be flagged to identify all entities acting as agents. A trade association suggested that field 2.19 “DBV” should be included for repos aggregation. ESMA considered not to add these fields, due to their little relevance for risk monitoring.

111. One TR asked ESMA to clarify how TRs should proceed in case both counterparties are sending reports to the TR but only one side is reporting a tri-party agent.
112. ESMA clarified this aspect in Guideline 23 where it is clarified how the TR should proceed when it has received the two sides of an SFT.

Q16. Do you agree with the proposed list of benchmarks and tenors? Are there other key interest rate benchmarks that should be included? Please detail the reasons for your response.

113. ESMA proposed that TRs should create separate positions for fixed-rate and floating-rate SFTs. For floating-rate SFTs, ESMA also proposed a list of rates for the calculation of separate buckets.

114. One TR, one data service provider and a trade association observed that “€STR” and other floating rates included in the proposed bucketing list are not among the ones listed in field 2.25 of the ITS on reporting.

115. In this regard, it is worth mentioning that the Guidelines on SFTR reporting, paragraph 259, clarified how rates not included in the ITS should be consistently reported. In the light of the already issued guidance on reporting of rates not included in the ITS list, ESMA decided to not further clarify this aspect in the Guidelines on SFT positions.

116. One TR proposed to only individually aggregate rates having a significant volume of data.

117. ESMA considers that all floating-rates listed in the proposed Guideline 19 to be significant for supervisory purposes, and therefore deserving an individual aggregation.

Q17. Do you agree with the proposed grouping of SFT positions based on the trading venue field? Please detail the reasons for your response.

118. ESMA proposed that TRs should aggregate positions based on the trading venue field with the following breaking down: (i) EEA on-venue; (ii) non EEA on-venue and (iii) off-venue.

119. One TR proposed that ESMA should communicate to TRs the list of updated EU venues’ MICs via an automatic, machine readable feed.

120. In this respect, ESMA considers that the list of TVs authorised to operate in the EU is available on ESMA’s website. The relatively reduced and stable number of entities does not seem requiring the set up of automatic and real time updates to the list for TRs.

121. One trade association and one TR agreed to the proposal.

122. One TR recalled that reporting trading venue is not mandatory for all action types and all asset classes, and asked for clarifications on how to perform calculations in these cases.

123. ESMA notices in this regards that reporting trading venue is always mandatory, with the exception of Margin Lending and action types EROR, ETRM and COLU, to which it is not applicable.
Q18. Do you agree with the proposed bucketing regarding maturity dates? What additional aspects should be considered when calculating the term of the SFTs and the residual maturity of the securities used to collateralise that SFT? Please detail the reasons for your response.

124. ESMA proposed that TRs should calculate separate positions for open-term and fixed-term SFTs, and set up a possible breakdown. ESMA also clarified how to calculate the terms of SFTs with regards to months which have less days than the preceding one.

125. A TR asked clarifications on how the proposed Guideline 18 (now Guideline 21) would apply to Margin Lending. ESMA clarified in this respect that all margin lending transactions should be classified as open term.

126. Regarding proposed Guideline 20 (now Guideline 22), the same TR complained about the complexity of the proposed approach, and set forth two alternative solutions: (i) to treat references to 29, 30 or 31 of the following month as references to “end of the month”; (ii) instead of referring to months, to simply consider 30 days intervals.

127. One trade association observed that Guideline 22 is similar to the Modified Following Business Day convention, and suggested to explicitly refer to it.

128. In this regard, ESMA notices that Guideline 22 is the same as Guideline 26 of Guidelines on position calculation (EMIR). In order to keep requirements consistent across reporting regimes, it appears appropriate to proceed as proposed in the CP.

Q19. Do you agree with the inclusion of all values on reconciliation status or additional grouping should be performed? Please detail the reasons for your response.

129. ESMA proposed that TRs should calculate separate positions depending on the reconciliation status of the SFT.

130. Respondents were generally supportive of the proposed way forward, hence ESMA retains it.
3.3 FSB positions

131. In the CP ESMA proposed some clarifications with regards to the calculation of positions for the purpose of FSB reporting by the relevant EU members of the FSB. However, the feedback to this consultation led ESMA to reconsider its proposals and decided to finally put those on hold for the time being.

132. ESMA understood from the responses that producing FSB pre-aggregated data for authorities will have an additional cost to the TRs, and be difficult to implement due to the need to combine regular calculations for authorities reporting to FSB and ad-hoc ones for the others.

133. In addition, ESMA understands that indeed the FSB positions would constitute an additional data process to be handled by the TRs. One respondent pointed out that the calculation and production of reports is a heavy-processing activity and also adds to network costs. Moreover, the introduction of a major processing overhead for TRs should be balanced against the existing processing activities which run such as ingestion, production of response message, feedback reporting, recurrent and adhoc reporting for regulators, reconciliation (both intra and inter-TR with associated file exchanges), and the calculation and production of public reporting, as well as less frequent but intensive processes such as entity merger activity and portability, all of which are incumbent on the TR to process.

134. Furthermore, ESMA is aware that the relevant authorities that have committed to report data to FSB are putting in place their own calculation processes based on transaction data.

135. ESMA will re-assess the need to issue guidance on FSB reporting. ESMA highly values the feedback received and will consider it in case the calculation of FSB positions will be established in the EU in the future.

136. The following paragraphs outline for transparency purposes the proposals included in the CP and the feedback received. As they are dependent on the decision to drop the requirement for the TRs, only a short account of those is provided.

Q20. Do you agree with the use of ISO 20022 XML messages for the FSB positions? Please provide the reasoning for your answer.

137. Five respondents provided feedback and it was mainly focused on the availability of the XML schemas at least six months ahead of the date of the application of the Guidelines. As indicated in paragraph 131, this requirement would be dropped for the time being. Should it be established in the future, ESMA confirms that indeed a sufficient lead time would be given to the TRs to implement the XML schemas.

Q21. Do you agree that the FSB reports should be calculated for all authorities (i.e. also NCAs/NCBs that are not mandated to report the FSB) for risk monitoring
purposes? Please elaborate on the relevant cost aspects. Please detail the reasons for your response.

138. In the CP ESMA indicated that given that FSB positions could serve as valuable source for risk monitoring at NCA/NCB level, it could be foreseen to provide all authorities access to these positions. The main reason for that was that they contained sectorial information, hence would not allow for identification of specific entity.

139. As requested, the feedback provided by the five respondents focused mainly on the cost elements of producing the data and on the need to know basis.

140. Respondents highlighted that FSB reporting would imply high one-off for implementation. In addition, the heavy-processing activities required would add up to the already ongoing processing activities, and would imply network costs. The implementation of both regular reports for authorities reporting to FSB and ad-hoc reports for other authorities was indicated as an additional cost source. One specific aspect which however could balance somehow the cost issue is to align the frequency of production of FSB reports with the one of the reporting to FSB, which at this stage is monthly.

141. ESMA took note that there is going to be an important one off cost to set up the data processing, but it should also be considered that the variable costs of calculation and distribution will be contained. This feedback will be taken into account in the future, when reassessing the situation.

Q22. Do you agree with usage of the ECB conversion rates? Are you aware any other public data source providing conversion rates for further currencies?

142. In the CP, ESMA indicated that the data preparation steps for FSB reporting partially overlap with the definitions of named positions above, hence part of the Guidelines on named positions apply to FSB positions as well. No comments were received to the proposal of the relevant general guidelines to be followed.

143. In the CP, ESMA mentioned that the FSB mandates aggregations on following transactions types: repos/reverse repos, securities lending and margin lending and included a the table structure categorized by the transaction types. No comments were received to the proposal.

144. Furthermore, ESMA highlighted another specificity of the FSB-mandated reporting - a strict location approach. This approach contrasts the one foreseen under SFTR where also branches of multinational firms in third countries are included in the named positions. As branches in third countries of EU entities are expected to report under the local requirements this would result in double counting. Hence, ESMA proposed that the SFTs concluded by those branches are excluded from the calculation. No comments were received to the proposal.

145. Many of the metrics requested by the FSB should be denominated in USD as the FSB needs to be able to aggregate them globally. To ensure harmonized currency conversion approach it is envisaged to mandate the usage of the free currency rates provided by the
ECB. As these rates are provided only for currencies against the EUR TRs should use currency triangulation for the final conversion to USD.

146. The four respondents indicate that there are certain issues with the availability of ECB exchange rates pairs and enquired further clarifications, also with regards to the use of the FED rates.

147. As the calculation of FSB positions will be dropped, the relevant clarifications on exchange rates are included only with regards to the named positions.

148. Moreover, it is worth highlighting that contrary to the previously outlined procedures on pairing and reconciliation (using the UTI), in the CP ESMA indicated that the FSB favors a different approach to account for pairing and reconciliation. This decision reflects the different reporting frameworks throughout the world and is based on halving relevant metrics. Therefore, ESMA indicated that TRs should decide on the basis of the LEIs of the counterparty pair whether a record is subject to double reporting (i.e. the entities are located within the same jurisdiction are subject to double reporting).

Q23. Which public and non-public sources of the LEI to sector mapping could be used to classify entities not reporting under SFTR? Please elaborate further on the proposed source.

149. ESMA further indicated the relevant maturity buckets for FSB reporting based on the transaction/collateral and the timedelta to be assessed. While for the named positions the entity and its respective LEI play a crucial role for the day to day supervision of each entity, ESMA highlighted in the CP the FSB monitoring is based on sector aggregates. Therefore ESMA requested TRs to map each LEI into to a FSB sector. ESMA indicated that this mapping should be done using the most recent information and the information provided in Table 6 of the CP.

150. ESMA further indicated that if the sector information is conflicting (e.g. an entity is reporting itself as being active in different sectors) the TRs should use a different approach depending whether they need to classify the sector on the basis of Reporting counterparty (1.4) or Other counterparty (1.11). The feedback pointed at the difficulties to derive this information from the LEI and some respondents asked ESMA to provide the relevant mappings to the TRs.

Q24. What additional aspects related to the aggregations for FSB reporting should be clarified? Please detail the reasons for your response.

151. ESMA proposed in the draft Guideline 32 of the CP that, for FSB positions, TRs should generate and implement a mapping between the values that are reported under SFTR and those reported to FSB for all dimensions that are not covered by Guidelines 28-31.

152. Two TRs observed that SFTR data elements do not fully mirror the FSB ones, and suggested that ESMA provided granular mapping to TRs to avoid divergent approaches.
this regards, ESMA notices that FSB might propose adjustments to TR’s mapping of fields or to propose a granular mapping document in the future.

**Q25. Do you understand and agree with the proposed mapping for repo and reverse repo of the FSB reporting guidelines? If not, please detail further.**

153. ESMA proposed lists of metrics, dimensions and mapping rules for the calculation of repos and reverse repos FSB positions.

154. One TR noted that FSB field “Market Segment-Trading” is optional, and this could lead to misreporting. Another TR expressed the same concern for fields “Tri-Party Agent” (1.14), “Agent Lender” (1.18), “Broker” (1.15) and “Currency of collateral nominal amount” (2.85). ESMA notes that and expects that the TRs perform the relevant calculations based on the data reported by the counterparties.

155. A data reporting service provider complained that Table 11 does not contain dimensions for collateral parts, which makes difficult to identify commodity asset classes. ESMA notes that at this stage the FSB data collection is focused on SFTs collateralised with securities and commodities are not relevant for that.

156. One TR asked to clarify if transactions reported with all action types are to be included in the aggregation or whether only those reported with NEW. ESMA notes that the flow data table should be populated only with the SFTs reported with action types NEWT or POSC and the trade state or stock tables should included all outstanding SFTs as of the reference date.

157. This TR also asked clarifications on how to represent net collateral.

**Q26. Do you understand and agree to the securities lending mapping of the FSB reporting guidelines? If not please detail further.**

158. ESMA proposed lists of metrics and dimensions to calculate FSB securities lending positions.

159. One TR noticed that fields “Reporting counterparty” and “Other counterparty” are mapped as correspondent to FSB field “Sector of the reporting party to a trade”.

160. Another TR suggested to take out of the aggregation fields “Price Currency” (2.50), “Tri-Party Agent” (1.14), “Agent Lender” (1.18) and “Broker” (1.15) as they are not mandatory. ESMA has taken note of this issue, and expects that TRs perform the relevant calculations based on the data reported by the counterparties. A data reporting service provider complained that Table 11 does not contain dimensions for collateral parts, which makes difficult to identify commodity asset classes. As already mentioned above, ESMA recalls that commodities are not relevant for FSB reporting at this stage.
Q27. Do you understand and agree to the margin lending mapping of the FSB reporting guidelines? If not please detail further.

161. ESMA proposed lists of metrics and dimensions to calculate FSB margin lending positions.

162. One TR proposed to take out references to optional fields, as this might lead to inconsistencies. ESMA has taken note of this issue, and expects that TRs perform the relevant calculations based on the data reported by the counterparties.

163. Another TR asked clarifications on how to represent net collateral.
4 Cost-benefit analysis

The Guidelines on SFT position calculations provide clarifications with the aim to establish a consistent and harmonised approach and a comprehensive procedure to carry out position calculations as required in accordance with Article 80(4) EMIR as referred to in Article 5(2) of SFTR and Article 5 of the RTS on data aggregation. The Guidelines cover the procedures TRs should follow to calculate the five different datasets which ESMA considers necessary for authorities to monitor financial stability.

ESMA is including a cost-benefit analysis outlining the qualitative assessment of the impact of the Guidelines to TRs.

These guidelines provide clear instructions to TRs who are legally required to produce position calculations. They leverage off the trade state information, which the TRs are already required to produce. This reduces any potential additional costs of calculating positions.

The guidelines also build on already existing requirements for TRs such as ISO 20022 XML file format, SFTP channel for data transmission, data cut-off time used to produce trade state data and ECB currency conversion rates.

On the data availability and record-keeping side, the incremental costs for TRs are also minimal, as ESMA’s simulation exercises run in the context of the Guidelines on position calculation (EMIR) indicated that the additional burden in terms of the volume of records that a TR will produce will increase by 4%. Given the similarities between position calculation under EMIR and SFTR in terms of complexity, volumes and periodicity, ESMA reckons that the incremental costs for the implementation of SFT position calculation processes will be equivalent to the EMIR ones.

In terms of frequency of the calculation of positions, ESMA considered to what extent reduced frequency, e.g. weekly, would be useful instead of daily. While setting up a calculation process at the TRs is probably the most costly part of a project, the frequency of a calculation module is not considered to be a significant cost driver. In addition, it was concluded that in crisis situations having a week old position of the exposures of a given entity or to a given product or market would not be desirable and would diminish the relevance of the position data.

It is acknowledged that there will be implementation costs for TRs. However, the feedback to the CP showed little concern from respondents on the implementation cost for named positions.

The resulting impact on reporting entities would be limited, and justified by the need to fund useful calculations which will in turn help authorities monitor financial stability in the EU.

The guidelines provide multiple benefits for authorities in that they will ensure that TRs are able to fulfil their legal obligation to provide positions in SFTs in a fashion that is consistent across EU markets.
Therefore the benefits will be wide-reaching, notably enhancing the ability for EU authorities to monitor systemic risks to financial stability in EU markets through the use of helpful named position data which authorities can use in their daily monitoring activities or in crisis situations.

As regards FSB reporting, respondents argued that the related calculations would require high one-off and ongoing costs. While not indicating specific figures, respondents noticed that FSB reporting is a heavy-processing activity, which requires the implementation of both recurrent and ad-hoc calculations.

In the light of the reasons explained under Section 3.3., and having regard to abovementioned cost concerns raised by respondents, the cost-benefit ratio for FSB reporting does not justify, for the time being, the implementation of the proposed calculations.
5 Advice of the Securities and Markets Stakeholders Group

In accordance with Article 16 of the ESMA Regulation ESMA requested the advice of the ESMA Securities and Markets Stakeholder Group. The SMSG decided not to provide an advice.
Annex: Guidelines on calculation of positions in SFTs by Trade Repositories

1 Scope

Who?

These Guidelines will apply to Trade Repositories as defined in Article 3(1) of SFTR and registered under Chapter III of SFTR.

What?

The Guidelines apply in relation to:

a) the calculations carried out by TRs and the format of provision of access to data pursuant to Article 80(4) of EMIR as referred to in Article 5(2) of SFTR and detailed under Article 5 of RTS on data aggregation

b) the level of access to positions provided by TRs to the entities included in Article 12(2) of SFTR with access to positions in line with Article 3 of RTS on data access.

When?

To ensure a smooth implementation of the Guidelines ESMA expects that TRs calculate positions in accordance with these Guidelines from 31 January 2022 onwards.
2 Legislative references, abbreviations and glossary of concepts and terms

Legislative references

* **SFTR**

* **EMIR**

* **ESMA Regulation**

* **SFTR Reporting Guidelines**
  - Guidelines on Reporting under Articles 4 and 12 SFTR\(^{17}\)

* **Guidelines on position calculation (EMIR)**
  - Guidelines on position calculation by trade repositories under EMIR\(^{18}\)

* **RTS on data aggregation**
  - Commission Delegated Regulation (EU) 2019/358 of 13 December 2018 supplementing Regulation (EU) 2015/2365 of the European Parliament and of the Council with regard to regulatory technical standards on the collection, verification, aggregation, comparison and publication of data on securities financing transactions (SFTs) by trade repositories\(^{19}\)

* **RTS on reporting**

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\(^{14}\) OJ L 337, 23.12.2015, p. 1
\(^{15}\) OJ L 201, 27.7.2012, p. 1
\(^{16}\) OJ L 331, 15.12.2010, p. 84.
\(^{19}\) OJ L 81, 22.3.2019, p. 30
securities financing transactions (SFTs) to be reported to trade repositories\textsuperscript{20}

\textit{ITS on reporting}  
Commission Implementing Regulation (EU) 2019/363 of 13 December 2018 laying down implementing technical standards with regard to the format and frequency of reports on the details of securities financing transactions (SFTs) to trade repositories in accordance with Regulation (EU) 2015/2365 of the European Parliament and of the Council and amending Commission Implementing Regulation (EU) No 1247/2012 with regard to the use of reporting codes in the reporting of derivative contracts\textsuperscript{21}

\textit{RTS on registration}  
Commission Delegated Regulation (EU) 2019/359 of 13 December 2018 supplementing Regulation (EU) 2015/2365 of the European Parliament and of the Council with regard to regulatory technical standards specifying the details of the application for registration and extension of registration as a trade repository\textsuperscript{22}

\textit{RTS on data access}  
Commission Delegated Regulation (EU) No 2019/357 of 13 December 2018 supplementing Regulation (EU) 2015/2365 of the European Parliament and of the Council with regard to regulatory technical standards on access to details of securities financing transactions (SFTs) held in trade repositories\textsuperscript{23}

\textbf{Abbreviations}

\begin{itemize}
  \item \textit{CP}  Consultation Paper
  \item \textit{ECB}  European Central Bank
  \item \textit{EEA}  European Economic Area
  \item \textit{ESMA}  European Securities and Markets Authority
  \item \textit{EU}  European Union
\end{itemize}

\textsuperscript{20} OJ L 81, 22.3.2019, p. 1  
\textsuperscript{21} OJ L 81, 22.3.2019, p. 85  
\textsuperscript{22} OJ L 81, 22.3.2019, p. 45  
\textsuperscript{23} OJ L 81, 22.3.2019, p. 22
Glossary of concepts and terms

1. “Positions” means the representation of exposures between a pair of counterparties that comprise the following sets defined under Named positions: Overview report, Loan Position Set, Collateral Position Set, Margin Set and Reuse Set.

2. “Outstanding SFTs” means those SFTs that have not matured or which have not been the subject of reports with action types ‘Error’, ‘Termination/Early termination’, or ‘Position component’ as referred to in Field 98 of Table 2 of Annex I to ITS on reporting.

3. “Variables” are those values either taken directly from the SFTR reporting fields or derived from those fields that will be used by TRs to calculate positions.

4. “Authority” means one of the entities referred to in Article 12(2) of SFTR.

5. “Metrics” are variables used to quantify the different calculations. The fields used to define metrics (and dimensions) follow the nomenclature as per the RTS and ITS on reporting. For instance, 1.17 means field 17 of table 1.

6. “Dimensions” are variables related to SFTs that are used to group SFTs together into positions.

7. “Reference Date” means the date the calculation refers to.
3 Purpose

8. These Guidelines are based on Article 16(1) of the ESMA Regulation. In line with that provision, they aim at “establishing consistent, efficient and effective supervisory practices within the ESFS, and to ensuring the common, uniform and consistent application of Union law” with regard to the requirements referred to in Section 1 under the heading ‘What?’ for the calculation of positions in SFTs by TRs. The Guidelines establish high-level principles that should be followed by the TRs for their position calculations. Those principles are complemented by specific procedures to be followed to ensure the timely and accurate reporting of positions by TRs.

9. These Guidelines also leverage on the requirement under Article 1(1) of RTS on reporting, according to which: “[a] report made pursuant to Article 4(1) of Regulation (EU) 2015/2365 shall include the complete and accurate details set out in Tables 1, 2, 3 and 4 of the Annex that pertain to the SFT concerned”. They also build upon Section 4.9. of the SFTR Reporting Guidelines, on timely reporting of the conclusion, modification and termination of an SFT, and on Section 4.3 of the same Guidelines, on the correct reporting of CCP-cleared positions by counterparties so that there is no double-counting between trade and position.

10. In order to promptly assess systemic risks to financial stability and quickly react in a crisis event, NCAs should be able to have an overview of entity level SFT exposures. However, the large volumes of data that ESMA expects to be reported will make it challenging for many authorities to swiftly process and analyse this data, preventing authorities from being able to evaluate risks.

11. In addition, the possibility for reporting counterparties to report their trades to different TRs poses a particular challenge for the establishment of a set of entity-level positions that is consistent, complete, and coherent across entities and SFTs.

12. Specifically, each individual TR may only hold partial information on an entity’s exposure with respect to any product and each of its counterparties. Hence, in some cases TRs can only calculate a partial TR-level position for any entity.

13. Therefore, the determination of an overall entity-level position requires an aggregation of the TR-level positions across several TRs. Overall entity-level positions should be determined by authorities and based on an aggregation of TR-level positions. Therefore, consistency in TR-level position calculation is essential. TRs should use common conventions, rules, and methodologies for their SFTR trade reporting determinations and calculations. It is worth noting that ESMA expects the application of the Guidelines to result in the following benefits:

- reduce efforts to request this information sporadically and ensure that no information is omitted;
- reduce processing time of information received;
- ensure a level-playing field in term of information to be provided by all TRs by establishing harmonised reporting;
- ensure consistent, harmonised and high standard of aggregate position data made available to relevant authorities;
- ensure complete information that is necessary for ESMA’s risk-based supervision.
4 Compliance and reporting obligations

Status of the guidelines

14. In accordance with Article 16(3) of the ESMA Regulation, TRs must make every effort to comply with these guidelines.
15. ESMA will assess the application of these guidelines by TRs through its ongoing direct supervision.

Reporting requirements

16. TRs are not required to report whether they comply with these guidelines.
5 Guidelines on calculation of positions in SFTs by Trade Repositories

I. Reporting timeline

Guideline 1. TRs should include SFTs in the relevant position aggregate(s) from the moment in which they are reported, even though settlement might only take place in the future. This includes both the loan side and the collateral side of the trade, regardless of the respective value dates.

Guideline 2. TRs should ensure that the calculations relate to the most recent full day’s set of trade state data, considering the Event date reported by the counterparties in accordance with the SFTR Reporting Guidelines and following the requirements under Article 5(1) of ITS on reporting. Calculations should be updated on each business day, by clearly identifying the applicable reference date for each calculation. TRs should also make the position available to authorities on the day of the calculation in line with the following steps:

<table>
<thead>
<tr>
<th>#</th>
<th>Event</th>
<th>Day/time</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>End of Event date T</td>
<td>Day T</td>
</tr>
<tr>
<td>2</td>
<td>Retrieve appropriate FX reference rates on day T for purposes of</td>
<td>Day T 16:00 UTC (17:00 CET)</td>
</tr>
<tr>
<td></td>
<td>converting SFTs where T2F57 (Market value) and T2F88 (Collateral</td>
<td></td>
</tr>
<tr>
<td></td>
<td>market value) should be converted, to be applied when calculation</td>
<td></td>
</tr>
<tr>
<td></td>
<td>is performed on day T+2.</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Reporting entities to submit SFT reports to TRs relating to event</td>
<td>From Day T - Day T+1 23:59 (</td>
</tr>
<tr>
<td></td>
<td>date T</td>
<td>counterparty local time)</td>
</tr>
<tr>
<td>4</td>
<td>Deadline for submitting SFT reports to TRs relating to event day T</td>
<td>Day T+1 23:59 (counterparty local time)</td>
</tr>
<tr>
<td>5</td>
<td>TR calculation of positions based on the latest trade state of</td>
<td>Day T+2 00:00 – 23:59 UTC</td>
</tr>
<tr>
<td></td>
<td>outstanding SFTs as of end of Event date T+1</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>Position reports based on Event date T are made available by the</td>
<td>Day T+2 00:00 – 23:59 UTC</td>
</tr>
<tr>
<td></td>
<td>TR to the relevant authorities.</td>
<td></td>
</tr>
</tbody>
</table>
II. Missing data for fields which are metrics or dimensions

Guideline 3. For SFTs missing data for one or more of the required metric or dimensions, TRs should include the SFTs with those missing values in a separate position. However, TRs should exclude from all relevant calculations the SFTs missing data for the “Reporting counterparty”, “Other counterparty” and “Type of SFT” dimensions.

III. Identification and treatment of outliers

Guideline 4. A TR should have in place a robust procedure to identify abnormal values, i.e. outliers, relating to the SFTs it receives from counterparties. For a given position, a TR should calculate positions according to the metrics which exclude reports with outliers, and also the metrics which include all reports which meet the dimensions for each calculation. Both calculations should be included into a single report. The TR should flag which positions include abnormal values. TRs should identify abnormal values in absolute terms and should not offset between positive and negative values.

IV Algorithms used in calculations

Guideline 5. Upon request from ESMA, a TR should have available at all times the calculation algorithms they use as well as the procedure(s) which they follow to produce each of the five datasets relating to the position calculations described in these Guidelines.

Guideline 6. When TRs provide an authority with access to erroneous data, and the TR has caused the error itself, the data should be updated by the TR so that it is corrected as soon as it is possible and the erroneous calculations for the previous two years, as of the last working day of each week, should be re-reported correctly. When a mistake by a reporting counterparty, rather than the TR, has led to an incorrect calculation by a TR, all authorities should be notified, and given the opportunity to request an amended version of each calculation that was incorrect from the relevant TR. Where part or all the data subject to corrections is being ported, only the TR to which the data was ported should perform the calculations following the corrections.

Guideline 7. TRs should maintain a record of all the position calculations which they have calculated for at least two years.

Guideline 8. TRs which receive data transferred from another TR should keep the previously calculated positions transferred from the old TR for at least two years and follow Guideline 7 prospectively.
V. Named positions

Guideline 9. When performing positions calculation identifying the counterparties to SFTs, the TRs should generate five separate positions reports. These reports are an overview report, a loan position report; a collateral position report; a margin report and a reuse report. These datasets should be uniquely identifiable and labelled with the relevant reference date. These reports should include the data referred to in Table 4.

Guideline 10. With regards to the overview report, the loan position report, the collateral position report and the margin report, a unique value should be calculated for each unique counterparty pair \((E_i, E_j)\), where \(i \neq j\), and set of dimensions \(Z_k\) at time \(t\), where \(t\) is a specific event date. Where both counterparties have reported to the same TR, the TR should calculate position for each of the two counterparties.

Guideline 11. TRs should only include in the calculations SFTs which are subject to the reporting obligation under Article 4 SFTR. In case Article 4 SFTR does not apply to one of the reporting counterparties, its SFT reports should be excluded from the position calculation.

VI Metrics

Guideline 12. TRs should calculate the metrics included in Table 2 - Metrics for positions. The price metrics should be calculated as weighted-averages, whereas the volume metrics should be calculated as a count of the number of UTIs and as a sum for each exposure variable and currency.

<table>
<thead>
<tr>
<th>Dataset</th>
<th>Volume metrics</th>
<th>Price metrics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overview Report</td>
<td>Number of transactions:</td>
<td></td>
</tr>
<tr>
<td></td>
<td>UTI (2.1)(^{24})</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Exposure:</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Principal amount on value date (2.37)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Principal amount on maturity date (2.38)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Loan Value (2.56)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Market value (2.57)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Outstanding margin loan (2.69)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Cash collateral amount (2.76)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Collateral market value (2.88)</td>
<td></td>
</tr>
<tr>
<td>Loan Report</td>
<td>Number of transactions:</td>
<td>Rates:</td>
</tr>
</tbody>
</table>

\(^{24}\) Unique Trade Identifiers (UTIs) are used to compute the number of transactions for repos and securities lending, and the number of existing bilateral margin lending relationships. This is not relevant for collateral reuse.
## Table 2 - Metrics for positions

<table>
<thead>
<tr>
<th>Dataset</th>
<th>Volume metrics</th>
<th>Price metrics</th>
</tr>
</thead>
<tbody>
<tr>
<td>UTI (2.1)&lt;sup&gt;25&lt;/sup&gt;</td>
<td>Exposures: Repos: Principal amount on value date (2.37) BSB: Principal amount on value date (2.37) SLB: Loan Value (2.56) SLB: Market value (2.57) ML: Outstanding margin loan (2.69) + Short market value (2.71)</td>
<td>Repos: Fixed rate (2.23 weighted by 2.37); Floating rate (2.32 weighted by 2.37)&lt;sup&gt;26&lt;/sup&gt; BSB: Principal amount on maturity date (2.38) divided by Principal amount on value date (2.37) minus 1, adjusted by the duration of the SFT with basis 365 (365 divided by date difference between value date 2.13 and maturity date 2.14) and weighted by 2.37 ML: Fixed rate (2.23 weighted by 2.69 and 2.71); Floating rate (2.32 weighted by 2.69 + 2.71 for margin loans)&lt;sup&gt;27&lt;/sup&gt;</td>
</tr>
<tr>
<td>Collateral Report</td>
<td>Exposure: Collateral quantity or nominal amount (2.83)&lt;sup&gt;28&lt;/sup&gt; Collateral market value (2.88)&lt;sup&gt;29&lt;/sup&gt; Cash collateral amount (2.76)</td>
<td>Haircut: Haircut or margin (2.89 weighted by 2.83 and/or 2.76)&lt;sup&gt;30&lt;/sup&gt; 3</td>
</tr>
<tr>
<td>Margin report</td>
<td>Exposure: Initial margin posted (3.8) Variation margin posted (3.10) Excess collateral posted (3.16)</td>
<td></td>
</tr>
<tr>
<td>Collateral reuse</td>
<td>Non-cash: Value of reused collateral (4.8) Estimated reuse of collateral (4.9) Cash: Reinvested cash amount (4.13)</td>
<td>Rate: Reinvestment rate (4.11 weighted by 4.13)</td>
</tr>
</tbody>
</table>

---

<sup>25</sup> Idem.

<sup>26</sup> Floating rates should be calculated only for the main reference market rates (see below).

<sup>27</sup> Taking into account the sign

<sup>28</sup> Taking into account the sign

<sup>29</sup> Haircut or margin shall be weighted by collateral quantity or nominal amount (2.83) when non-cash collateral is used, otherwise by cash collateral amount (2.76). For SFT portfolios, since only one haircut value will be reported, the sum of cash and non-cash collateral should be used as weight.
Guideline 13. Where for the same position a TR receives collateral messages featuring both positive and negative values, it should include them into separate positions, one for positive and one for negative sign collateral.

Guideline 14. The figures included in calculations should not be rounded, but the calculated position should be rounded to an appropriate figure.

VII Currency of metrics

Guideline 15. TRs should calculate positions in the currency the SFT was denominated in for all currencies issued by EEA Member States; for GBP, CHF, USD and JPY; and an EUR equivalent value based on the ECB reference rate for the given event date for all the aforementioned currencies. In addition, the TRs should calculate the EUR equivalent value of a bucket, including AUD, CAD, HKD, NZD, SGD and TWD and of a bucket of all the remaining currencies.

VIII Dimensions

Guideline 16. TRs should use the fields included in Table 3 - Dimensions for position reports under SFTR (including the currencies of metrics) to calculate the respective position reports, namely the overview report, the loan report, the collateral report, the margin report and the reuse report. TRs should follow Guideline 17 to Guideline 23 for detailed instructions on the inclusion of the different dimensions. For the rest of dimensions for which the calculation is not otherwise specified, the data should be grouped in accordance with the reported values.

<table>
<thead>
<tr>
<th>Dimensions30</th>
<th>Overview</th>
<th>Loan</th>
<th>Collateral</th>
<th>Margin</th>
<th>Reuse</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reporting counterparty (1.3), (3.4), (4.3)</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>Other counterparty (1.11), (3.6)</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td></td>
</tr>
<tr>
<td>Counterparty side (1.9)31</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

30 Including also the currencies of the metrics
31 Only for SFTs collateralised at transaction level
Table 3 - Dimensions for position reports under SFTR (including the currencies of metrics)

<table>
<thead>
<tr>
<th>Dimensions(^{32})</th>
<th>Overview</th>
<th>Loan</th>
<th>Collateral</th>
<th>Margin</th>
<th>Reuse</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tri-party agent (1.14)(^{32})</td>
<td>x</td>
<td>x</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Agent lender (1.15)(^{33})</td>
<td>x</td>
<td>x</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Type of SFT (2.4)</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cleared (2.5)</td>
<td>x</td>
<td>x</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Trading venue (2.8)</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Master agreement type (2.9)</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Maturity date (2.14)</td>
<td>x</td>
<td>x</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>General collateral indicator (2.18)</td>
<td>x</td>
<td>x</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Open term (2.21)</td>
<td>x</td>
<td>x</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Rates</td>
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<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Fixed (2.23)</td>
<td></td>
<td>x</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Floating (2.25)</td>
<td></td>
<td>x</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Principal amount currency (2.39)</td>
<td></td>
<td>x</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Price currency (2.50)</td>
<td></td>
<td>x</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Security quality (2.51)</td>
<td></td>
<td>x</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Security type (2.55)</td>
<td>x</td>
<td>x</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Base currency of outstanding margin loan (2.70)</td>
<td></td>
<td>x</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Collateralisation of net exposure (2.73)</td>
<td>x</td>
<td>x</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

\(^{32}\) True/False indicator
\(^{33}\) True/False indicator
### Table 3 - Dimensions for position reports under SFTR (including the currencies of metrics)

<table>
<thead>
<tr>
<th>Dimensions</th>
<th>Overview</th>
<th>Loan</th>
<th>Collateral</th>
<th>Margin</th>
<th>Reuse</th>
</tr>
</thead>
<tbody>
<tr>
<td>Type of collateral component (2.75),</td>
<td>x</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(4.6)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>x</td>
</tr>
<tr>
<td>Cash collateral currency (2.77),</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>x</td>
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<tr>
<td>(4.10)</td>
<td></td>
<td></td>
<td>x</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Collateral quantity or nominal amount</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>x</td>
</tr>
<tr>
<td>(2.83)</td>
<td></td>
<td></td>
<td>x</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Price currency (2.86)</td>
<td></td>
<td></td>
<td></td>
<td>x</td>
<td></td>
</tr>
<tr>
<td>Collateral quality (2.90)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>x</td>
</tr>
<tr>
<td>Maturity date of the security (2.91)</td>
<td></td>
<td></td>
<td></td>
<td>x</td>
<td></td>
</tr>
<tr>
<td>Jurisdiction of the issuer (2.92)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>x</td>
</tr>
<tr>
<td>Collateral type (2.94)</td>
<td>x</td>
<td></td>
<td></td>
<td></td>
<td>x</td>
</tr>
<tr>
<td>TR to which the other counterparty</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td></td>
<td>x</td>
</tr>
<tr>
<td>reported(^\text{34})</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Reconciliation status</td>
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<td></td>
<td></td>
<td></td>
<td>x</td>
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<tr>
<td>Type of re-invested cash investment</td>
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<td></td>
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<td>x</td>
</tr>
<tr>
<td>(4.12)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Re-invested cash currency (4.14)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>x</td>
</tr>
</tbody>
</table>

\(^{34}\) Generated by the TRs
Guideline 17. TRs should include the information about the jurisdiction of the issuer by including the following country code information: (a) for each EEA Member State; (b) for the United Kingdom, (c) for Switzerland, (d) for the United States, (e) for Japan, (f) a bucket for European, non-EEA jurisdictions (Russia, Ukraine, Turkey), (g) a bucket of other advanced jurisdictions such as Australia, Canada, China, New Zealand, Singapore and Taiwan and (h) a bucket of the rest of the world.

Guideline 18. TRs should flag with TRUE or FALSE the participation of a Tri-party agent and an agent lender in the SFT.

Guideline 19. TRs should calculate separate positions for fixed-rate SFTs and for floating-rate ones. When calculating positions in floating-rate SFTs, the TRs should create the following buckets of rates and tenors of those rates:
   a. €STR
   b. Euribor (1M, 3M, 6M, other tenors)
   c. €STR-OIS (Overnight Index Swap 1d, 1w, other tenors)
   d. GBP Libor (1M, 3M, other tenors) and the respective successor rate
   e. USD Libor (1M, 3M, other tenors) and the respective successor rate
   f. SOFR (1M, 3M, other tenors)
   g. USD OIS (Overnight Index Swap 1d, 1w, other tenors)
   h. Other floating rates

Guideline 20. TRs should calculate positions with the following breakdown: (a) EEA on-venue, (b) non-EEA on-venue and (c) off-venue, when field Trading venue is reported with XOFF or XXXX. TRs should consider a transaction as “EEA on venue” if the field Trading venue is reported with a MIC included in ESMA’s register of trading venues. TRs should consider a transaction as “non-EEA on venue” if the field Trading venue is reported with a MIC which is not included in ESMA’s register of trading venues but it is listed in the database of MIC codes maintained by ISO.

Guideline 21. TRs should use the following buckets to aggregate SFTs with similar values for term of the SFT and for maturity date of the security. All margin lending transaction should be classified as open term. Term of the SFTs and residual maturity of the security should be calculated as the difference between the SFTs Maturity Date and the reference date, based on a Gregorian calendar.
   a. Open term
   b. Overnight (1 working day)
   c. More than one day and up to, and including, one week
   d. More than one week and up to, and including, one month
   e. More than one month and up to, and including, three months
   f. More than three months and up to, and including, six months
g. More than six months and, and including, one year
h. More than one year

Guideline 22. In the event that a SFT (or the security used to collateralise this SFT) has a maturity date which does not exist in the month of the reference date (i.e. 29, 30, 31 month dependent), the decision for which of the maturity buckets listed under Guideline 21 that SFT should be included in should be made by treating that SFT in the same way as if the calculation were being made on the maturity day for the month of the reference date. For example, if a SFT position calculation has a reference date of 31 January and the SFT (or the security used to collateralise this SFT) matures on 28 February, that SFT (or the security used to collateralise this SFT) should be included in the ‘One month or less’ maturity bucket. If a reference date is on 31 January and the maturity date is 1 March, then that SFT (or the security used to collateralise this SFT) should be included in the ‘More than one month but no more than three months’ maturity bucket. If a calculation’s reference date is on 30 April, and the SFT (or the security used to collateralise this SFT) matures on 31 May then that SFTs (or the security used to collateralise this SFT) should be included in the ‘One month or less’ maturity bucket.

Guideline 23. TRs should calculate separate positions depending on the reconciliation status of the SFT attributed in accordance with the values included in Table 3 of Annex I of RTS on data aggregation. Where the TR has received the two sides of SFTs that are included in a position, the TR should calculate separate position for each side, even when they are fully reconciled.

V.IX Summary of metrics and dimensions to be included in the position reports

<table>
<thead>
<tr>
<th>Variable</th>
<th>Overview</th>
<th>Loan</th>
<th>Collateral</th>
<th>Margin</th>
<th>Reuse</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reporting counterparty (1.3)</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x (3.4)</td>
<td>x (4.3)</td>
</tr>
<tr>
<td>Other counterparty (1.11)</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x (3.6)</td>
<td></td>
</tr>
<tr>
<td>Counterparty side (1.9)</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tri-party agent (1.14)</td>
<td></td>
<td>x</td>
<td>x</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

---
35 https://registers.esma.europa.eu/publication/searchRegister?core=esma_registers_upreg
36 https://www.iso20022.org/market-identifier-codes
37 Only for SFTs collateralised at transaction level
<table>
<thead>
<tr>
<th>Variable</th>
<th>Overview</th>
<th>Loan</th>
<th>Collateral</th>
<th>Margin</th>
<th>Reuse</th>
</tr>
</thead>
<tbody>
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<td>Agent lender (1.15)</td>
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</tr>
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<td>Count of UTI (2.1)</td>
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</tr>
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</tr>
<tr>
<td>Cleared (2.5)</td>
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<td>x</td>
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</tr>
<tr>
<td>Trading venue (2.8)</td>
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<td>x</td>
<td></td>
</tr>
<tr>
<td>Master agreement type (2.9)</td>
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<td>x</td>
<td>x</td>
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</tr>
<tr>
<td>Maturity date (2.14)</td>
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<td></td>
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<td>x</td>
<td>x</td>
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<td>General collateral indicator (2.18)</td>
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<td>Open term (2.21)</td>
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<td>x</td>
<td></td>
</tr>
<tr>
<td>Rates</td>
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<td></td>
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</tr>
<tr>
<td>- Fixed</td>
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<td></td>
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<td></td>
</tr>
<tr>
<td>- Floating</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- BSB calculated</td>
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<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lending fee (2.67)</td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Principal amount on value date (2.37)</td>
<td></td>
<td>x</td>
<td></td>
<td>x</td>
<td>(Repo and BSB)</td>
</tr>
<tr>
<td>Principal amount currency (2.39)</td>
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<td></td>
<td></td>
<td></td>
<td>x</td>
</tr>
<tr>
<td>Price currency (2.50)</td>
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<td></td>
<td></td>
<td></td>
<td>x</td>
</tr>
<tr>
<td>Security quality (2.51)</td>
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<td></td>
<td></td>
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<td>x</td>
</tr>
<tr>
<td>Security type (2.55)</td>
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<td></td>
<td></td>
<td></td>
<td>x</td>
</tr>
<tr>
<td>Market value (2.57)</td>
<td></td>
<td>x</td>
<td></td>
<td>x</td>
<td>(SLB)</td>
</tr>
</tbody>
</table>
### Table 4 - Set of variables for position reports under SFTR

<table>
<thead>
<tr>
<th>Variable</th>
<th>Overview</th>
<th>Loan</th>
<th>Collateral</th>
<th>Margin</th>
<th>Reuse</th>
</tr>
</thead>
<tbody>
<tr>
<td>Outstanding margin loan (2.69)</td>
<td>x</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Base currency of outstanding margin loan (2.70)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>x (4.6)</td>
</tr>
<tr>
<td>Short market value (2.71)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>x (ML)</td>
</tr>
<tr>
<td>Collateralisation of net exposure (2.73)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>x</td>
</tr>
<tr>
<td>Type of collateral component (2.75)</td>
<td></td>
<td>x</td>
<td></td>
<td></td>
<td>x (4.6)</td>
</tr>
<tr>
<td>Cash collateral amount (2.76)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>x</td>
</tr>
<tr>
<td>Cash collateral currency (2.77)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>x (4.10)</td>
</tr>
<tr>
<td>Collateral quantity or nominal amount (2.83)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>x</td>
</tr>
<tr>
<td>Price currency (2.86)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>x</td>
</tr>
<tr>
<td>Collateral market value (2.88)</td>
<td></td>
<td>x</td>
<td></td>
<td></td>
<td>x</td>
</tr>
<tr>
<td>Haircut or margin (2.89 weighted by 2.83 and/or 2.76)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>x</td>
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<tr>
<td>Collateral quality (2.90)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>x</td>
</tr>
<tr>
<td>Maturity date of the security (2.91)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>x</td>
</tr>
<tr>
<td>Jurisdiction of the issuer (2.92)</td>
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<td></td>
<td></td>
<td>x</td>
</tr>
<tr>
<td>Collateral type (2.94)</td>
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<td></td>
<td></td>
<td>x</td>
</tr>
<tr>
<td>TR to which the other counterparty reported</td>
<td>x</td>
<td></td>
<td></td>
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<td>x</td>
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<tr>
<td>Reconciliation status</td>
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<tr>
<td>Initial margin posted (3.8)</td>
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</table>
### Table 4 - Set of variables for position reports under SFTR

<table>
<thead>
<tr>
<th>Variable</th>
<th>Overview</th>
<th>Loan</th>
<th>Collateral</th>
<th>Margin</th>
<th>Reuse</th>
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<tbody>
<tr>
<td>Variation margin posted (3.10)</td>
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<tr>
<td>Excess collateral posted (3.16)</td>
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<tr>
<td>Value of reused collateral (4.8)</td>
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<td>Estimated reuse of collateral (4.9)</td>
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<td>Reinvestment rate (4.11 weighted by 4.13)</td>
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<tr>
<td>Type of re-invested cash investment (4.12)</td>
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<td>Re-invested cash amount (4.13)</td>
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<tr>
<td>Re-invested cash currency (4.14)</td>
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