



SWIFT Response

FSB Consultative Document :

Standards and Processes for  
Global Securities Financing  
Data Collection and Aggregation

12 February 2015

## Foreword

SWIFT thanks the Financial Stability Board for the opportunity to respond to the consultation paper on Securities Financing Data Collection and Aggregation.

SWIFT is a member-owned, cooperative society headquartered in Belgium. SWIFT is organised under Belgian law and is owned and controlled by its shareholding users, comprising more than 3,000 financial institutions. We connect more than 10,800 connected firms, across more than 200 countries and territories. A fundamental tenet of SWIFT's governance is to continually reduce costs and eliminate risks and frictions from industry processes.

SWIFT provides banking, securities, and other regulated financial organisations, as well as corporates, with a comprehensive suite of messaging products and services. We support a range of financial functions, including payments, securities settlement, reporting, and treasury operations. SWIFT also has a proven track record of bringing the financial community together to work collaboratively, to shape market practice, define formal standards and debate issues of mutual interest.

We are supportive of the work the FSB is doing to develop standards and processes for global securities financing data collection and aggregation. In our response, we suggest that the FSB considers the adopting the internationally recognised ISO 20022 standard for these reporting purposes; the table starting on page 7 shows in detail how some of the informal specifications given in the consultation document can be mapped to the more formal definitions found in ISO 20022.

We thank the Board again for the opportunity to comment. Please do not hesitate to contact us should you wish to discuss this further.



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## 1 Introduction

In this response SWIFT provides following input:

1. We highlight the importance of rigorous and detailed specifications for data reporting, particularly if data from multiple sources is to be compared or aggregated.
2. We explain that ISO 20022 is an extensible source of industry agreed terms and definitions that already covers many of the reporting requirements presented in the Consultative Document, and which can be used to bring the necessary precision to specifications.
3. We further explain how ISO 20022 can be used to develop financial message definitions for the electronic exchange of the data elements specified.
4. We provide commentary on the initial list of key data elements related to securities financing transactions (SFTs) which are presented in the consultation (FSB Consultative Document Table 1), including references to equivalent elements already defined by ISO 20022.

We explain how ISO 20022 can be used to develop data sets for the additional elements that are also relevant for financial stability purposes (FSB Consultative Document Tables 2 - 9). SWIFT has no specific view on the scope of the data elements that should be included in the reporting requirements, however we believe it is essential that a two-step phase is adopted in the design and definition process, if the policy objectives are to be met.

In the first step, it is key that the scope of the data elements are agreed, such that *all* possible required data elements are identified and agreed *ex ante*; in a second step, a structured approach to the data specification elements can be agreed, such as ISO 20022.

Taking this two-step approach, the FSB will be able to ensure that the reported data will be both comprehensive and consistently implemented, allowing for seamless aggregation and comparison purposes.

## **2 About ISO 20022**

ISO 20022 is an open industry standard that is being adopted globally in the financial industry. Central banks and market infrastructures across the world are increasingly using the standard, with around 70 payments and securities clearing and settlement systems implementing ISO 20022. In the US, the Fed has declared an intention to implement ISO 20022 for US payments, and DTCC is using it for its Corporate Actions service. In Asia, ISO 20022 is used by the Chinese domestic payments system, CNAPS. It is also used by the Japanese securities depository, JASDEC, the Singapore stock exchange (SGX), the Australian stock exchange (ASX), and it has been chosen as the standard for the forthcoming Australian real-time payments system. It is also the standard used for messaging by strategic initiatives such as the Single Euro Payments Area (SEPA), the ECB's TARGET2-Securities, and upcoming migrations of TARGET2 and EBA (EURO1/STEP1).

ISO 20022 standards have been developed across many financial business processes including retail and wholesale payments, foreign exchange, securities lending, repo transactions, collateral management, securities settlement and asset reconciliation.

### 3 Using ISO 20022 as standardisation methodology

In the context of regulatory reporting and data aggregation, it is critical that all reporting entities interpret the specification of the data to be reported in the same way. Without this consistency, data from different entities cannot be meaningfully compared or aggregated, and the policy goals of the regulation can become difficult or impossible to achieve. The more precisely each data element in a report is specified, the more likely it is that implementers of the regulation will submit consistent data – and the easier it is for the supervisory community to examine the data.

ISO 20022 is the ISO approved standardisation methodology for financial messages and data sets. It includes precise definitions for key financial industry concepts. These definitions are maintained in a 'business model' - a formal structure similar to a conventional dictionary (i.e. a repository of terms with their definitions), but with the added ability to capture the relationships between terms. For example, the ISO 20022 Business Model defines the term 'account', but also captures that there are different types of account (cash, securities, etc.) that nevertheless share some common attributes; that an account has an account owner, and an account servicer, that the account servicer is a financial institution, and so on. The business model also defines the format or data type of individual data items, be they dates, amounts, text, codes or larger structures such as name and address. This not only ensures consistency of data reported, but also avoids any misinterpretation of the data submitted.

The content of the business model is defined and maintained by the users of the standard, subject to a strong registration and governance process that ensures consistency and quality. More information on ISO 20022 can be found on [www.iso20022.org](http://www.iso20022.org).

We believe that the rigour and precision of the definitions found in the ISO 20022 business model make it an excellent resource through which to ensure that data elements specified in a regulatory reporting context are interpreted consistently by implementers. Moreover, once the data elements for a business process have been identified, it is straightforward to create a message definition that can be used to transport the data. In these definitions it is possible to distinguish a baseline set of common details and national or regional additions, facilitating tailored reporting at national or regional level, as well as the consistent reporting required at global level.

If the FSB agrees to use ISO 20022 as the methodology for developing financial messages and data sets, SWIFT is ready to complete the mapping in the existing business model and add any additional content required.

#### 4 Comments on initial list of key data elements (FSB Table 1)

To illustrate the methodology described in the previous chapter, we have taken the informal specifications for the initial list of key data elements (Table 1) given in the consultation document and mapped them to the more formal definitions found in the ISO 20022 Business Model. In the table below we have mapped these data elements to the appropriate equivalent in the ISO 20022 data repository, highlighting in each case the standard description and format for the data element.

Current gaps are highlighted in red as in some instances we have been unable to find a precise equivalent, either because it does not exist in the model, or because the informal definition is insufficiently precise to make a confident attribution. The former case is easily fixed by adding the missing content; for the latter the informal specifications would need to be further refined by a domain expert.

Repo Data Element	Securities Lending Data Element	ISO 20022 Business Element Name	ISO 20022 Description	ISO 20022 Supported Format
Value date	Value date	Value Date	Date on which a payment must be executed	ISO Date ( <i>Format: YYYY-MM-DD format</i> )
Maturity date	Maturity date	Maturity Date	Planned date, at the time of issuance, on which an interest bearing financial instrument becomes due and principal is repaid by the issuer to the investor.	ISODatetime <i>Format: expressed in either UTC time format (YYYY-MM-DDThh:mm:ss.sssZ), local time with UTC offset format (YYYY-MM-DDThh:mm:ss.sss+/-hh:mm), or local time format (YYYY-MM-DDThh:mm:ss.sss). These representations are defined in "XML Schema Part 2: Datatypes Second Edition - W3C Recommendation 28 October 2004" which is aligned with ISO 8601.</i> <i>Note on the time format:</i> <i>1) beginning / end of calendar day 00:00:00 = the beginning of a calendar day 24:00:00 = the end of a calendar day</i> <i>2) fractions of second in time format</i> <i>Decimal fractions of seconds may be included. In this case, the involved parties shall agree on the maximum number of digits that are allowed.</i>
Collateral type	Collateral type	Collateral Type	Specifies the type of collateral.	List of codes (Bank Guarantee, Bond, Cash, Insurance, LCRE, Other, Physical entries, Securities, Stock certificate) <i>Format is 4 letters</i>
Collateral quality	Collateral quality	No exact equivalent, but could be		

		covered by rating of securities		
Haircut	Haircut	Haircut	Haircut or valuation factor on the security expressed as a percentage.	Percentage Rate <i>Format: Rate expressed as a percentage, ie, in hundredths, e.g, 0.7 is 7/10 of a percent, and 7.0 is 7%</i>
Principal Amount		Deal Amount	Deal amount of the second leg.	Currency and Amount <i>Format: Currency Code + the number of fractional digits (or minor unit of currency) must comply with ISO 4217.</i> <i>Note: The decimal separator is a dot.</i>
	Amount of security lent	Deal Amount	Deal amount of the second leg.	Currency and amount <i>Format: Currency Code + the number of fractional digits (or minor unit of currency) must comply with ISO 4217.</i> <i>Note: The decimal separator is a dot.</i>
Counterparty type	Counterparty (Borrower) type	Party Role	Specifies each role linked to a securities trade and played by a party at that step in a securities transaction flow.	List of codes- <i>Format: 4 Letters code</i>
(Repo) Market segment (bilateral, tri-party or CCP-cleared)		Securities Transaction Type	Underlying information about the settlement transaction.	List of codes: TriParty Repo, TriParty Reverse Repo, Repo, Reverse Repo (+other code values) - <i>Format: 4 Letters code</i> <b>No code value for CCP Cleared</b>
	Beneficial owner (Security lender) type	Beneficial Ownership	Specifies whether there is change of beneficial ownership.	Yes/no indicator
Repo Rate	Type of security lent	Repurchase Rate	Rate to be used to recalculate the repurchase amount.	Percentage rate <i>Format: Rate expressed as a percentage, ie, in hundredths, eg, 0.7 is 7/10 of a percent, and 7.0 is 7%</i>
	Type of security lent	Security/Asset Classification	Classification of the asset.	<i>Classification type of the financial instrument, as per the ISO Classification of Financial Instrument (CFI) codification, for example, common share with voting rights, fully paid, or registered.</i>
Cash currency		Opening Settlement Amount	Total amount of money to be paid or received in exchange for the securities at the opening of a securities financing	Currency and amount <i>Format: Number of monetary units specified in a currency, where the unit of currency is explicit and compliant with ISO 4217. The decimal separator is a dot.</i>



			transaction.	<i>Note: A zero amount is considered a positive amount.</i>
	Cash collateral reinvestment – Asset type	No equivalent today		
Collateral currency		Security/ Denomination Currency	Currency in which a security is issued or redenominated.	Currency code <i>Format: Code allocated to a currency, by a maintenance agency, under an international identification scheme as described in the latest edition of the international standard ISO 4217 "Codes for the representation of currencies and funds". Valid currency codes are registered with the ISO 4217 maintenance agency, and consists of three contiguous letters.</i>
	Cash collateral reinvestment – Maturity	No equivalent today		

## **5 Development of standards for detailed data sets (FSB tables 2 - 9)**

In the FSB consultation document, data elements for reporting flow and position/stock information on SFTs were also listed (Tables 2 – 9). Many of these data elements are already included in the ISO 20022 business model. Additional data elements, together with the appropriate message formats, can be defined and developed according to the ISO 20022 methodology.

SWIFT has already mapped these data elements and is happy to share this information with the FSB. As this work might be difficult to interpret without further explanation, we would be ready to go through the results in detail should that be of interest.

In our view ISO 20022 provides a solid foundation on which to base the development of formats for these new reporting purposes. This will enable the reporting of SFT information at each stage of the process described in the Consultation and enable efficient data aggregation. SWIFT is ready to provide further input to the FSB in order to fully standardise the data needs for global SFT reporting and aggregation, should that be of interest.

**\*\* END OF DOCUMENT \*\***