



# **SWIFT's response to the Office of Financial Research on the viewpoint: “An Approach to Financial Instrument Reference Data”**

[Subject]

**SWIFT**

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**Confidentiality: Public**

SWIFT thanks OFR for the opportunity to provide comments on the viewpoint An Approach to Financial Instrument Reference Data.

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 over 3,000 financial institutions. We connect more than 11,000 connected firms, in 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.

If you wish to discuss any aspect of our response please do not hesitate to let us know.

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## **OFR mandate and goal**

SWIFT understands that the Office of Financial Research (OFR) has a mandate to address the current issues with data describing financial instruments and that its immediate goal is to prepare and publish a set of standards for creating and describing financial instrument reference data. This goal is clearly identified: “to create and make available financial instrument reference data standards that can capture the diverse, complex, and evolving nature of financial instruments based on common terminology, formats, and structures”. The OFR’s Viewpoint paper also clearly describes the plan to establish a common language for financial instruments.

Since its inception SWIFT has been in the business of standard creation and therefore applauds the mandate and OFR’s efforts. We agree with the OFR that the financial services industry needs standards across financial instruments and business domains for the terms, definitions, and formats of financial instruments. As observed in the OFR’s Viewpoint, important efforts have been made in the past to develop international standards, however these continue to co-exist with proprietary commercial *de facto* standards; the resulting inconsistencies prevent interoperability, i.e. the ability to exchange and use reference data among financial firms, their service providers and regulators.

## **Implementation options**

We understand that the OFR has carefully considered multiple options, ranging from a pure private-sector solution to a pure public-sector solution. SWIFT believes the chosen approach (private-sector solution with public-sector involvement) is indeed the best approach. In this approach, financial market participants, standards-setting organisations, and reference data vendors would represent the private sector. The private sector would provide expertise on financial markets, data standards, data management infrastructure, and on the channels needed to distribute conforming financial instrument reference data efficiently and effectively. The public sector, led by the OFR, would act as the catalyst and guide to drive change, to align U.S. public sector efforts, and to strive for global harmonisation in coordination with efforts by regulatory authorities internationally.

We believe that private-sector involvement is necessary in the design of the solution, and that its involvement will help encourage broad adoption and implementation – not least by facilitating coordination outside the US. The development of the LEI is a successful example of such public-private collaboration. SWIFT participated in the development of the LEI, and continues to be an important partner in the LEI roll-out today. As SWIFT is not a financial instrument reference data vendor and has extensive experience and know-how in standards building, it is ideally placed to support the OFR’s effort.

## **Choice of standard**

As the OFR is considering the ISO 20022 standard in the Viewpoint paper, we would like to take the opportunity to note this standard’s main characteristics.

ISO 20022 is the open methodology for developing new financial messaging standards and for harmonising existing financial messaging standards. As an initiative of the International Organization for Standardization (ISO), ISO 20022 was conceived to harmonise the fragmented financial standards landscape, and can best be described as a ‘recipe’ for developing financial messaging standards. The main ingredients of this recipe are a development methodology, a registration process, and a centralised, machine-processable “e-Repository”.

The ISO 20022 standard is being embraced by supervisors across the world as a preferred format for data reporting purposes because the data model which lies at the heart of the standard is the ideal reference point to help regulators, market overseers and reporting firms to harvest, aggregate and interpret data which is unambiguous, clear and equivalent irrespective of its source. ISO 20022 is particularly appropriate for use in public-private sector initiatives because it is an open and transparently-governed standard that is platform-neutral, and free to access, implement, and extend. It provides a universally agreed language that can be shared by business, legal, and technical experts, greatly simplifying the interpretation and implementation of any regulation defined in that language.

Business requirements defined in terms of ISO 20022's unique conceptual Business Model and Business Process layer allow implementers to understand both the financial concepts, and the contexts in which these concepts are applicable. The rigour and precision of the definitions found in the ISO 20022 business model make it a particularly apt resource to ensure that data elements specified in any financial services 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 between a baseline set of common details and national or regional additions, facilitating tailored reporting at national levels, as well as consistent reporting at global level.

#### Industry Implementation of ISO 20022

ISO 20022 has also been widely adopted across the global financial industry for a variety of other purposes. There are around 200 ISO 20022 initiatives globally, ranging from live implementations to communities that are in the early stages of market consultation. Central banks and market infrastructures across the world are increasingly using the standard, with around 70 payments and securities clearing and settlement organisations implementing ISO 20022. In the United States, the Federal Reserve System has declared an intention to implement ISO 20022 for US payments, and the Depository Trust and Clearing Corporation (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) in Europe, the European Central Bank's (ECB's) TARGET2-Securities, and EBA (EURO1/STEP1). In addition, 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. The ECB has selected ISO 20022 for the new reporting requirements on money market transactions in the euro area, and the Bank of England has chosen ISO 20022 for the reporting of sterling money market data.

In Europe, ESMA has specified the use of ISO 20022 for the communication of swap and security-based swap trade data between trade repositories and relevant authorities under the revised EMIR regulation. ESMA is also developing ISO 20022 messages for financial firms to efficiently report details of securities financing transactions to trade repositories.

Particularly relevant to the scope of the Viewpoint paper is the EU's updated Markets in Financial Instruments Directive ("MiFID2"), which is due to enter into force in January 2018. The MiFID2 Regulatory Technical Standards define the data standards and formats for the information that must be reported on financial transactions and instrument reference data, including the methods and arrangements for reporting and the form and content of such reports. ESMA has developed ISO 20022 messages to support this reporting, which include the details for reference data relating to tradable financial instruments.

Finally, ISO 20022 has also created a close cooperation with other Standards initiatives. Within the financial services industry, multiple messaging standards are being used, which is why the Standards Coordination Group has been established by the standardisation bodies (FIX, FpML, SWIFT, XBRL, ISITC and FISD) to develop an approach that incorporates these standards into a broader framework. . The Standards Coordination Group has agreed on an ‘investment roadmap’ which affirms the commitment of each standards organisation to the ISO 20022 business model. The roadmap lays the groundwork for defining a common underlying financial model and ensuring a level of interoperability between these standards by producing a consistent direction for the utilisation of messaging standards and communicating that direction clearly to the industry. The respective business processes included in the roadmap are, or will be, incorporated within the ISO 20022 business model. The model allows for the future development of ISO 20022 XML based messages to support any necessary business processes, while also permitting the continued use of existing, domain-specific, syntaxes and protocols in certain circumstances. The members of the Standards Coordination Group are committed to meeting on a consistent basis to ensure the roadmap continues to accurately depict the standards environment.

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## ANNEX

### 1. Scope of standard

ISO 20022 - Universal Financial Industry Message Scheme - is the international standard that defines the ISO platform (methodology, process, repository) for the development of financial message standards and data sets. Its scope includes international (cross-border) and domestic financial communication between financial institutions, their clients and the international or domestic 'market infrastructures' involved in the processing and reporting of financial transactions.

The ISO 20022 business modelling approach allows users and developers to represent financial business processes and underlying transactions in a formal but syntax-independent notation. These business transaction data and process descriptions (called the Business Model) are the "real" business standards. They can be converted into physical messages in the desired syntax.

ISO 20022 covers all financial business areas. Standards have been developed across many financial business processes including retail and wholesale payments, cards, trade, foreign exchange, clearing, collateral management, settlement, asset reconciliation and transaction reporting. ISO 20022 is widely adopted 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 adopting ISO 20022 today.

Further information about can be found on [www.iso20022.org](http://www.iso20022.org).

### 2. Level of compliance (with financial instrument reference information)

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 the Business Model which has the 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.

The recent development exercise required for MiFID/MiFIR transaction reporting resulted in further completion of the ISO 20022 Business Model for all instrument classes. If the case may arise the ISO 20022 Business Model can cater for the missing functionalities, including further elements for financial instrument reference information, as the remaining gaps can be filled using the highly structured approach for ongoing maintenance of the business model.

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. The precision of the definitions found in ISO 20022, combined with the open but rigorous process for adding new content, makes it an excellent resource for ensuring that data elements specified in the context of financial instrument reference information are maintained in a disciplined way, in order to reduce the chances of ambiguity.

### 3. Implementation feasibility (e.g. cost)

As mentioned above ISO 20022 is now widely used, particularly in the context of market infrastructures, and many financial firms have considerable expertise and experience in the implementation of ISO 20022 projects. Basing financial instrument reference information on ISO 20022 will enable industry players to further recoup their investment in supporting the standard.

ISO 20022 messages can be implemented on any network or communication channel, by any messaging provider. ISO 20022 implementations make use of mainstream, well-supported technology and can adapt to new technologies as they emerge.

Finally, the existence of a common business model accepted by other standards ensures a level of semantic interoperability. A common business model also means there is an agreement about the precise definition of data elements exchanged, irrespective of message syntax. This simplifies data mapping from these other standards to ISO 20022 for reporting purposes. FPL (for FIX), ISDA (for FpML) and other standards bodies have committed to support ISO 20022 via the Standards Coordination Group. This commitment should ensure that the use of ISO 20022 as the single reporting standard for financial instrument reference information will facilitate industry implementation, as it provides a common business model accepted by other standards bodies.

#### 4. Non-functional requirements (e.g. extensibility)

ISO 20022 offers significant extensibility. As already indicated ISO 20022 is very much the definitive standard for financial messaging, and it is not identified exclusively with any one sector of the financial industry. We have seen ISO 20022 adopted in payments for SEPA, and by an increasing number of payment market infrastructures. At the same time it has also become more prevalent in securities e.g. with T2S and as the standard for collective investment vehicles (mutual funds or unit trusts) processing.

ISO 20022 has extensive market practice associated with it to ensure a disciplined approach to the use of the standard. This is again something which would contribute to the integrity of financial instrument reference information, reduce the scope for ambiguity and ensure that the data submitted can be aggregated by regulatory authorities. A number of software-based tools are available to test and calibrate firms' compliance with accepted market practice for the use of the standard in various messaging flows, and these could also be leveraged in the reporting context.

#### 5. Openness

ISO 20022 offers a valuable common process and model for defining and structuring financial data, and an open governance process that ensures a level playing field for standardisers and users. It also offers expert international scrutiny of submitted content.

ISO 20022 is not controlled by a single interest. It is open to anyone in the industry who wants to participate, and ISO 20022 messages can be implemented on any network or communication channel, by any messaging provider.

The methodology and supporting e-Repository are free for anyone to implement in any business or software environment, or on any network.

#### 6. Reusability

As mentioned in point 1 above, and in point 7 below, ISO 20022 is being adopted rapidly in both payments and securities messaging for market initiatives, regulatory requirements and for a range of financial industry processes. We therefore believe that opportunities to re-use the investment in ISO 20022 will both be there at the outset, and continue to grow significantly over time.

Reusability is possible at the technology, but also at the business level.

At the technology level, ISO 20022 supports re-use of software applications and components, SOA services, Middleware/Enterprise Service Bus, message and data modelling and governance tooling, network interfaces. ISO 20022 implementations make use of mainstream, well-supported technology and can adapt to new technologies as they emerge. ISO 20022 messages can be implemented on any network or communication channel, by any messaging provider.

At the business level, the ISO 20022 business model provides a single, reusable way to describe financial business concepts - the open and consistent methodology and documentation make it much easier for business analysts to re-use their expertise within and across domains.

#### 7. Level of adoption in other regulatory frameworks

ISO 20022 is the standard used for messaging by strategic initiatives such as the Single Euro Payments Area (SEPA), in the ECB's Target 2 Securities initiative, the upcoming migrations of Target 2 and EBA EURO1/STEP1. Therefore ISO 20022 is already used by thousands of corporates and banks throughout Europe, and is being implemented by all CSDs and direct members of T2S, as well as by all banks using Target 2 and EBA EURO1/STEP1. The 20022 standard has also been widely adopted by the common investment vehicle (mutual funds/ unit trusts) industry.

#### 8. Governance and change management

ISO 20022 is subject to a transparent and open governance process and a structured methodology for change management, as outlined by the process below which covers the addition of new messages.

ISO 20022 should not be thought of as static but as a constantly evolving standard. The evolution, however, occurs in a controlled and structured way, to avoid any ambiguity and to ensure that stability is never compromised; changes are made to provide certainty and clarity for users as to what the changes are, and how and when they will be implemented.

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