

# Putting More Order in the World of Messages

**TARGET2-SECURITIES** It's a challenging task to keep track of things in the variety of message exchanges between financial institutions. Despite global standards, manifold market nuances and annual Standards Releases lead to constant changes that require respective adjustments. Now SWIFT Standards has developed a web-based portal that is to offer intelligent and comprehensive support. TARGET2-Securities, the European market infrastructure project for the settlement of securities transactions in Europe, is one of the first users of the portal. *Siegfried Vonderau | Gunnar Dickfeld*



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The European System of Central Banks (ESCB) is working on a fundamental reorganization of the system for the settlement of securities transactions in central bank money for Europe. With the aim of creating a uniform technical platform, TARGET2-Securities (T2S) is to consolidate the fragmented European market for the settlement of securities transactions – especially in cross-border business. The ensuing efficiency gains will benefit customers through lower fees.

## **Global standard with local variations**

When communicating with the platform, T2S is based on the network-independent ISO 20022 messaging standard, which strives to establish a global convergence of existing and new messaging standards from various fields of financial management. The final technical specification of messages takes place on the basis of the widely-used and machine-readable XML standard (detailed information on ISO 20022 is available at [www.iso20022.org](http://www.iso20022.org)).

Whereas the ISO 20022 standard sets applicable international guidelines, local variations can be defined for actual usage

in message traffic as long as they conform to the global guidelines. These market nuances – or market practices – are driven by the needs of the local user community which exchanges these messages among themselves and specified accordingly. As an example, ISO 20022 allows various identification number systems such as ISIN, CUSIP and SEDOL. However, a user community can define the use of a single identification number – this is ISIN for T2S – and specify this in XML schemas.

## **Initial situation: T2S messages**

ISO 20022 comprises not only messages for cash management but also for other business areas such as messages for securities transactions, trade financing and treasury. Therefore the standard provides an ideal basis for T2S, which communicates with the affiliated institutes not only by means of messages from the securities area but also uses messages from cash management, account management and reference data. T2S offers a total of 128 messages from seven business areas as well as two message headers for A2A communication with the platform.

Since ISO 20022 is still a very young standard, a vast number of these messages had to be developed by the four central

banks that develop the T2S platform on behalf of the Eurosystem (Banque de France, Banca d'Italia, Banco de España and Deutsche Bundesbank, abbreviated as: 4CB), in close cooperation with SWIFT Standards and the market participants and in accordance with the modeling principles of ISO 20022.

Deutsche Bundesbank plays a particularly important role in this process because it is responsible for the coordination of message development and their subsequent maintenance within 4CB. Among other things, changes in the messages – for example as part of annual Standards Releases – have to be identified, coordinated with various groups (4CB, SWIFT Standards, market participants, ISO) and made available in various formats. In addition to XML schema data, this comprises the specifications of individual messages into other formats such as PDF, XLS and HTML at the request of market participants.

The vast number of messages, as well as their provision in various document forms, (mail) communications with various groups and distribution via ECB's website area poses a special challenge because of the various tools in use, and this entails an inherent risk of inconsistency. The whole process all the way to publication of the

message for the market participants therefore calls for a high level of manual effort in generating the message, quality testing and linking.

It therefore seems logical to use a suitable solution that offers as many (or all) of the previously mentioned tasks as possible from a single source to simplify the management of messages and their future maintenance and to reduce the risk of discrepancies.

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#### The formula: MyStandards

Each year banks are confronted with huge piles of paper for the documentation of messages, and this involves high personnel expenses and corresponding costs. Every change must be carefully examined and carried over to the existing A2A communication with other institutes. Otherwise there is a threat of errors in message traffic and in the worst case it can lead to the failure of entire business processes.

SWIFT Standards, as part of the Standards Organization, is only all too familiar with these problems. Together with selected market participants – including Deutsche Bundesbank as the representative for T2S – a solution was sought for an interactive, collaborative and web-based solution in a pilot phase. In mid 2012, the web-based portal from SWIFT Standards was introduced as “MyStandards” and has been available to market participants ever since.

The portal contains all information on global standards, i.e., both SWIFT’s own MT standards as well as the new ISO 20022 standards. It enables an interactive view of the SWIFT User Handbook and of the ISO website [www.iso20022.org](http://www.iso20022.org), where users can not only comfortably browse

through messages but also export these messages in various formats. In addition to the browser view, simple schema, PDF and Excel files are available for further processing locally.

Furthermore, the portal contains all information and changes from the annual standards releases. As a result, users can view the versions of a single message type before and after implementation of a new standard release at the touch of a button. Changes are automatically highlighted

and are indicated with a simple, clear symbol. Reference to the respective change request makes it easy to identify the origin of a change. Thus the analysis of annual standards release is simplified and going through and conquering huge piles of paper could soon be a thing of the past. However, the possible implications for the business process still have to be analyzed by users themselves.

Similar to the global standards, their local market nuances, market practices and bilateral formats of message types can be imported as usage guidelines in the portal and compared. Consequently, the portal is based on individual financial institutes, standardization groups and providers of financial infrastructures that record their (partly proprietary) message formats and store them in a central location from where they can make them available to partner institutes.

The goal is the fast and uncomplicated exchange and comparison of these specifications: Institute A, which exchanges messages of a certain type on a regular basis with Institutes B and C or which, for example, directly participates in T2S, could compare the respective specifications in MyStandards and display the dif-

ferences at the touch of a button. This is a practical help in the implementation of new processes or business relations. Moreover, such a comparison can bring about steps towards further harmonization, which benefit both sides. As is the case with other collaborative platforms, the added value of the portal is realized through the number of users who mutually provide content for one another.

#### Practical application

After conclusion of the pilot phase, TARGET2-Securities decided to use MyStandards for their range of tasks (identification and reconciling changes, communication and coordinating with various groups, publishing various formats) ► 1. The expenses and preparation involved – such as the migration of specifications – are an investment in the future that is expected to pay off in the future for all T2S participants.

As part of the previously agreed license terms, T2S users can view the specifications not only in the browser but also download them as Schema, Excel or PDF files. Search functions enable the rapid location of certain data fields and elements. Adopting the explanatory notes down to the item level from T2S documentations ensures a complete information base. Examples for individual messages continue to be attached as appendices as an illustration in a concrete case. The comparison function in MyStandards allows a comparison of newer versions of T2S messages with previous versions; i.e., in the future, it will be easier to detect changes and analyze the effects of T2S change requests.

Based on the User Detailed Functional Specification (UDFS) Version 1.2.1 published in September 2012, the 4CB have relocated the T2S messages to MyStandards in order to use the MyStandards functionality as a first step for undertaking independent design and development activities. Following a short pilot phase with selected participants (ECB, members of the

T2S subgroup on message standardization), T2S messages have been available to all market participants since May 2013 in MyStandards as well. As a result, they are able to quickly and clearly identify future changes to T2S messages – the next UDFS Version 2.0 is expected to be released in June 2014.

Of course T2S itself also profits from the changeover. Just the innovation of providing all necessary data for exporting various file formats based on one single import offers a significant improvement in previous processes and reduces the risk of inconsistencies within the specifications. Instead of the very time-consuming creation of numerous file formats, which required several tools and quality checks, now only one single format is necessary for the import. In addition, the 4CB no longer has to identify the impact of a Standard Release on T2S with a great deal of manual effort but can easily and directly track the changes to the T2S messages. This considerably simplifies the analysis of a Standard Release and cost for the implementation can be estimated faster and better.

Since T2S is one of the first users to adopt MyStandards on a large scale, several “teething problems” had to be overcome in close cooperation with SWIFT Standards. Both sides profited from the cooperation

from the early beginnings in the pilot phase right up to the publication of T2S messages on MyStandards. Over the course of this cooperation, valuable tips and suggestions were given and implemented on

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further developing its user-friendliness, which in turn benefits all users of MyStandards.

**Conclusion**

It's still too early to make a full assessment since it has only recently been opened to market participants. However, it can already be concluded that the portal represents a clear and long-awaited step forward. A host of functionalities certainly won't take jobs away from IT experts and business analysts, but they will make life easier for them. The portal provides speedy help when answers to specific questions on particular messages are searched for. What previously had to be

searched for painstakingly in handbooks, can now be found quickly with the help of modern browser and search functions.

Although the portal already offers added value for one institution, its full potential can only be exploited with the number of users who want to provide content to one another and do so. Although MyStandards has been continuously improved since the pilot phase and as part of the message migration, there are currently three areas that could be optimized:

- Up to now, the utilization and authorization concept at two different levels – groups on one side and user distribution lists on the other – only enables the simple management of content on MyStandards for user groups with different types of authorization to a limited extent.
- To better fulfil the objectives of the open ISO 20022 Standard, the MyStandards “management tool” should also offer open interfaces for importing messages and exporting data.
- Last but not least, system performance still needs to be optimized to keep up with the steady growth in usage.

The future will show how well the advantages could be implemented and applied and how they helped reduce costs in the end. Along with the continuing optimization of existing functions, the portal is a good basis for making further improvements that could replace time-consuming processes by making content provided by users available for additional systematic usage. Deutsche Bundesbank is currently evaluating how MyStandards can be used for the second market infrastructure of the Eurosystem – TARGET2 – as part of the pending MX migration. ■

**Authors:** Siegfried Vonderau is Head of Division TARGET2 / TARGET2-Securities Services Management; Gunnar Dickfeld is ISO 20022 expert and responsible for the T2S Evolution Coordination Group at Deutsche Bundesbank in Frankfurt/Main.

