



HOW THE FUND OPERATION IS EVOLVING: NEW PROCESSES AND STANDARDS

Introduction to the Guidelines for the Standardization of operations in the Asset Management industry

June 2016





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EXECUTIVE SUMMARY

"Real progress happens only when advantages of a new technology become available to everybody"

(Henry Ford)

There is no principle truer than this, when it comes to encouraging change. If change is to be successful, it has to come from the whole community that will be using it. This consideration leads to other reflections on how we can or must guide an extended transformation: using which levers, and within what timeframe.

The people who experience an economic and financial context are no different from a "community" in its broader sense. In this specific case, the plan to adopt "Guidelines for the standardization of operation in the asset management industry" represents a significant change in the way intermediaries – whether they be distributors, asset management companies, payment agents or hubs – interact with each other.

The process of change began in 2011, at the request of the authorities (Consob and the Bank of Italy) and with the support of industry associations (ABI and Assogestioni). The process was driven by the need to improve efficiency, and by the benefits of moving towards a distribution model based more on the open architecture approach.

Lastly, the timeframe: this is the time that was needed to define, together with the rest of the industry, the methods and the process for adopting common standards.

The road towards the adoption of ISO 20022 technical standards and operational best practices within the asset management industry has been a long one, and there have been several intermediate stages.

The use of ISO 20022 messaging to exchange information between intermediaries is not a technical tool in itself, but represents a common structural basis for the future construction of processes and therefore of the Guidelines.

Clearly, it is no easy task for industry players with different roles and operational models to converge and move towards harmonised processes, but the possibility of "harmonization" that comes from the adoption of a common standard is certainly a necessary and key factor. In practice, this is borne out by the growing number of areas that have been studied in recent years by the ABI Lab Operations & Standards Observatory. These areas have gradually been included in subsequent versions of the Guidelines:

Guidelines V1 (2011):

- Account opening, order management processes;
- Transfer of shares:
- Fund Processing Passport.



Guidelines V2 (2012) - integration of:

- · Corporate events and self generated trades;
- Reconciliation of shares:
- Revision of the TDT Fund transfer model.

Guidelines V3 (2016) - integration of:

- TDT Single Leg Fund transfer model consolidation of ops model & timeframe;
- Transfer of positions/investments between payment agents;
- "AML Due diligence" data set;
- "FATCA" data set:
- "CRS" data set:
- Price report;
- Standard form for initial subscription.

This Report contains the latest version of the Guidelines for the standardisation of the asset management industry, including the technical appendices.

The section preceding the Guidelines illustrates the main findings emerging from the quantitative analysis on the extent of the adoption of ISO 20022 standards.

FROM THE GUIDELINES TO THE IMPLEMENTATION SUPPORT PHASE

In June 2011, the "Funds Standards Support" project was formally launched. Its main objective is to assist the participants in the phase of implementing the Guideline standards.

ABI Lab was identified as the technical coordinator of the project, thanks to its technological and organisational expertise.

ABI and Assogestioni have played an important role in terms of the overall coordination of the implementation plan, mainly in relation to the publicising and dissemination of the standard.

A Steering Committee has also been set up, with the aim of efficiently organising the activities and managing the governance of the project, in order to guarantee, define and verify the activities and services delivered. The Committee was tasked with identifying, developing and coordinating the research activities, by monitoring the current actions and by proposing new content of interest to the asset management industry.

Finally, the project also involved Swift, which has played a central role in the design and maintenance of ISO 20022 messaging.

A strategic element of fundamental importance to the success implementation of the Standard has been the creation of a pilot community comprising distributors, asset management firms, payment agents and hubs.

The project thus involved two separate phases: during the first phase (06/2011 -



06/2013) many of the pilots (who were the first to begin the implementation route) adapted the new technical/operational models.

The second phase (06/2013 - 06/2015) involved supporting to those who had already implemented the Standard, while supporting the others who had recently started the process.

In order to launch the process, the pilots were invited to perform few "macro activities". One of the first and most important activities was a Gap Analysis of the general and operational recommendations, as well as a macro analysis between ISO 20022 messaging and their proprietary flows. These activities led to the drafting of a project plan, to evaluate the impact on the existing operational model.

With regard to the Gap Analysis, a self-assessment model was prepared, with the best practices being grouped into various areas to create five main sections. For each best practice, the current adequacy model was defined, along with the company departments involved in the implementation phase, and the planned lines of intervention.

The use of a common methodology made the subsequent analysis phase more efficient and consistent.

The continuous dialogue among the participants during the pilot phase also enabled the optimisation of the ISO 20022 messaging, which was the subject of 4 releases (R2, R3, R4 and R5) which represented a major consolidation of the technical layer. It also extended the initial perimeter of the Guidelines to other macro areas such as reconciliations, corporate events and shares transferability.

All these activities led to the publication of the Version 2.0 Guidelines in 2012, highlighting once again that the current standardisation project not only required a revision of the IT model used for the exchange of digital flows, but also involved a remodelling of the internal organisational and operational processes.

Version 2.0 was again shared with Consob and the Bank of Italy. On conclusion of the pilot phase of the project, which was entirely satisfactory in terms of the growth in the number of participants and the scope of its perimeter, June 2013 saw the start of phase 2, which extended the activities for a further two years until June 2015. The key factors of the second phase of the project included the use of work groups to analyse specific issues, such as the transferability of shares between paying agents, and the definition of standardised AML and FATCA data sets.

The evolution of ISO 20022 messages were also regularly monitored. Two further releases of ISO 20022 messaging (R6 and R7) were published, which, in view of the level of stability that had now been achieved, no longer covered the order messages but only the accounts management messages.

Phase 2 of the "Funds Standard Support" project formally ended in May 2015. At that time, there were 37 intermediaries and 7 vendors/outsourcers participating to the working community.



FROM THE SUPPORT PHASE TO THE CREATION OF THE ABI LAB OPERATION & STANDARD FUND LAB - OBSERVATORY

Midway through 2015, having noted the level of interest and the need for ongoing support, also for the development of the Standard and to investigate certain operational aspects, the ABI Lab Operation & Standard Fund Lab (Observatory) was formally set up, in order to provide permanent supervision of Operations issues in the asset management industry.

The ABI Lab Operation & Standard Fund Lab represents a real evolution of the service model. The starting point is the monitoring and continuous dialogue among participants regarding operational changes due to regulatory factors and new dynamics produced by the market itself.

These changes have a strong impact on the two main areas of the Observatory's research: the evolution of the funds' operations, and the evolution and maintenance of the technical Standard.

In this new role, ABI Lab is working in close contact with ABI and Assogestioni, which periodically highlight the drivers for change and the major issues, particularly from a regulatory point of view.

The main topics are:

- close attention to the processes and specifically the logic of end to end framework;
- growing importance on KPI's measurement by specific indicators, both in relation to process, and in relation to volumes;
- tech Lab, to support specific operations.

In this evolved model , there has been even more focus on the setting up of work groups. They have dealt with (or will deal with in the future) other issues of common interest such as: the standardised subscription form, reconciliation of master data and services, extending the use of ISO 2002 to include hedge funds, and a "light" distribution agreement.

Finally, there are also parallel support activities for the intermediaries who have not yet begun the implementation process.

The process of evolution is still ongoing. The ABI Lab Operation & Standard Fund Lab monitors the alignment between the needs of the market and the technical and operational scope of the Standard.

THE STANDARD: AN INTERNATIONAL OVERVIEW

At EC level, the regulatory panorama is constantly evolving: over the next few years, on the one hand there will be a consolidation of current initiatives such as T2S, while on the other, there will be a need to look at the new models resulting from the introduction of MIFID II, CSDR and the Capital Market Union.

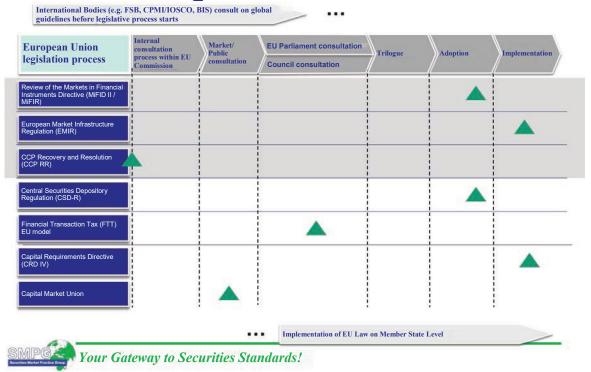
The diagram below shows some of the main regulatory areas that are currently being defined or implemented in the asset management industry.

As can be seen, these projects are interconnected, and they are at different stages. Therefore it is reasonable to assume that over the next 2 to 3 years, a large part of



the efforts and budgets of the intermediaries will be devoted to these initiatives.

Process Legislation at EU level



The combined effect of the regulatory impact on the continuous globalisation of the services and distribution models offered by the financial intermediaries (CSD, ICSD, CSDR) will make it increasingly clear that it is appropriate, if not necessary, to optimise the implementation component through economies of scale, which will be increasingly less local and based more on the sharing of global experiences.

In this context, the analysis of operational models which all have a common denominator of business requirements and regulatory restrictions will help to define best practice practices and technical layers, which are a key factor for success.

Within the asset management industry, there are various international working groups (e.g. SMPG, FINDEL, GAIA, ALMUS and FPSG), which have been working for years to harmonise models and define global market practices to support the distribution processes of investment funds in the various asset classes. A common denominator is the use of ISO 20022 messaging as a communication standard.

The adoption of ISO 20022 is based on the principle of representing and describing the static and dynamic component of the operational process separately from the messaging level and is therefore not only a communication standard but a cultural model on which the technical layer can be developed.



In Europe, many countries have begun a process of transformation with the aim of moving towards the use of standardised models based on ISO 20022. Some of these, listed below, have achieved significant results:

- **Denmark:** the ISO 20022 standard is now used by the Transfer Agent mode, while for the CSD, migration will take place simultaneously with the implementation of the T2S project, scheduled for the end of 2018.
- **Norway:** the use of ISO 20022 is particularly common, and 1.4 million transactions per month, between the VPS and the respective counterparties.
- Sweden: activities are underway to automate the transferability processes for UCITS units.
- **Switzerland:** the plan to adopt the ISO 20022 standard is coordinated by the Swiss Commission for Financial Standardization (SCFS), which aims to define deadlines for best practices and tools.

The process is now at an advanced stage, and most of the players have already adopted the ISO 20022 standard. Work is also underway to harmonize the Fund transfer process with that of securities.

- Luxembourg: there are two work groups, ALMUS and Findel.
 - ISO 20022 cross-border messaging is widely used: 65% of orders processed by the Transfer Agent comes from ISO 20022 (source: EFAMA annual report 2015) and detailed best practices were published several years ago.
 - Findel is now working to harmonise the processes of transferability of Fund shares.
- **Germany:** Work is underway on revising the best practices and all ISO 20022 messaging for the domestic market: only those intermediaries with major cross-border business have adopted the system to a significant extent.
- UK: in the pension funds area, best practices and related ISO 20022 messaging
 are common and have been stable for some time. They cover the main operational
 areas, which range from order management through to statements of account and
 pricing management.
 - Particular attention has been given to the processes of re-registration of accounts and transfer of Fund between intermediaries. The solution adopted is "multi asset type", and can be used indiscriminately for investment funds, pension funds or ETFs.

The testimonies from these countries show that the sharing of global objectives based on the definition of roadmaps and priorities can have positive impacts at individual level, and can make a significant contribution to the creation of a more open, efficient and harmonised market.



ADOPTION OF THE ISO 20022 STANDARD

The strong need for change to be as extensive as possible in order to generate important benefits at "ecosystem" level combines with a strong focus on the monitoring of the extent to which the Standard has been adopted.

From the outset, it was known that it would take time to generate the critical mass that would lead to the first returns in terms of efficiency. Over time, it has been important to monitor the trend in this growth, and its extent. This monitoring involved two specific surveys: the first in June 2014 and the second in July 2015.

THE METHODOLOGY

The second survey was launched in July 2015 and analysed the extent to which the ISO 20022 standard has been adopted. Specific recommendations were issued by ABI and Assogestioni, to ensure a high level of participation.

A questionnaire was used, consisting of three specific sections:

- the first was aimed at gathering the total number of operations processed by the intermediary through its proprietary flows;
- the second was aimed at identifying the current volumes exchanged via ISO flows, for each counterparty:
- the third section referred to the estimated ISO volumes over 12 months.

Over the months that followed, replies were received from the intermediaries listed below. They represent a significant share of the asset management market:

- 10 asset management firms;
- 32 banks and banking groups;
- 7 payment agents.

The work methodology involved the following steps:

- 1. the replies sent by the intermediaries were collected;
- 2. the total number of Fund transactions on the domestic market was determined:
- 3. the market scenarios were analysed, by business model (Italian funds and foreign funds);
- 4. KPIs were elaborated based on the extent to which the ISO 20022 standard had been diffused;
- 5 areas for attention were identified

The replies were analysed on the basis of the data reported by the asset management firms and payment agents. Where possible, that data was then compared against the data received from the distributors, in order to verify consistency, particularly with reference to the number of orders processed on a daily basis. If any significant differences were found, the necessary checks were carried



out with the counterparties.

That process gave an accurate scenario of the volumes exchanged between the distributors and the payment agents or asset management firms.

Finally, the KPIs were determined, representing the current situation and the 12 month forecast:

- KPI-1: Percentage of Asset Under Management (AUM) reachable via ISO 20022 (total AUM vs AUM of ISO-compliant asset management firms);
- KPI-2: Percentage of orders exchanged via ISO 20022 (total market orders vs orders exchanged in ISO 20022);
- KPI-3: Growth in ISO 20022 orders during the life-cycle of the project;
- KPI-4: Size of the ISO 20022 community.

Before looking at the individual KPIs, it would be appropriate to look at how the reference total was determined, namely the annual total of FUND subscriptions, reimbursements, switches and services (Eg investment or reimbursements or switches plans).

This information cannot be obtained through any reliable market source, and therefore it was necessary to use an empirical model, which is partly based on the statistical data supplied by Assogestioni and partly on the data provided by a sample of payment agents/asset management firms/distributors.

The following estimates are updated as of the second quarter of 2015, and they can be considered reliable with a tolerance of around 20%:

- operations in open Italian-funds: 27.5 mln;
- operations in foreign open funds-own by Italian groups (round trip): 14 mln;
- operations in foreign open funds-own foreign groups: 13.8 mln.

These numbers therefore not only refer to the counterparties who replied to the questionnaire, but to the whole of the national retail market.

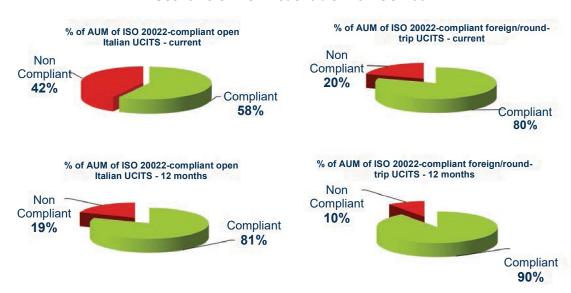
KPI FINDINGS

The main results of the identified KPIs are given below. For the first two KPIs, a split was made between the open Italian funds and the round-trip/foreign funds. For each of them, the situation on the survey data (3Q 2015) and the related 12 month forecast, was given.

The first indicator refers to the percentage of AUM reachable via ISO 20022.



Figure 1
Scenario of AUM reachable with ISO 20022



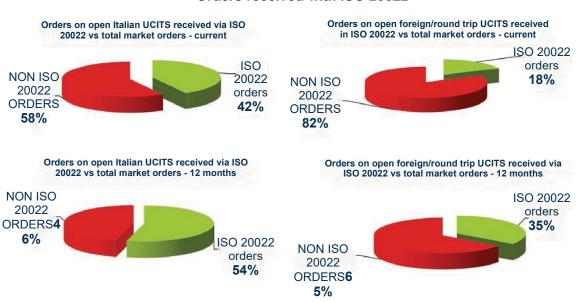
58% of the AUM of Italian funds and 80% of the AUM of foreign/ round-trip funds can now potentially be reached via ISO 20022 messages sent by the distributors to the asset management firms/payment agents.

The 12-month growth forecasts relate as to 40% to the Italian law firms, and as to 12% to the foreign/round-trip funds.

The average coverage of AUM estimated on a 12 month basis will be more than 80%.

Before interpreting the data, we have illustrated the picture for the second KPI, which concentrates on the actual percentage of orders (subscriptions, reimbursements, switches and services) exchanged via ISO 20022.

Figure 2
Orders received with ISO 20022





42% of the orders on Italian funds and 18% on foreign and round-trip funds are now exchanged via ISO 20022 messages sent by the distributors to the asset management firms or payment agents.

If we look at the total ISO 20022 orders on foreign and Italian funds exchanged today, and then compare it against the 12-month forecast, the average rate is more than 40%.

Below is an explanation of the findings in the graphs for the first two KPIs.

Open Italian funds

Looking at the data, it is immediately obvious that most of the major asset management firms have already adopted the Standard (58% of AUM), and that the volume of operations settled by ISO is about 42%.

Although this level of diffusion is positive, the following two factors must be noted:

- In most cases, the volumes of orders were reached through the migration of the 'captive' distributor, which is typically a major banking distributor, and not via an extensive migration of the distribution network;
- The 12-month forecast is only "fair", especially with reference to the orders (+28%) whereas for the AUM it is 40%. Also in this case, a crucial factor is the absence of any real plan to migrate the whole distribution network.

Looking at the dynamics of the adoption of the Standard, it can be seen that it is only when the first step is typically taken by an asset management firm that is becoming "ISO compliant", and only subsequently driven by the distributors, that the real migration process takes shape.

The drivers are therefore a combined effect of the asset management firms and the distributors.

Round-trip/foreign funds

In the Italian distribution model, the foreign investment companies (SICAVs) use a local payment agent; therefore, unlike the system for the Italian funds, the cost of adapting to the Standard is not borne by the investment company (the foreign SICAV) but by the payment agent.

In the market there are six main counterparties with the role of market paying agents, which handle approximately 90% of the total volumes. Most of the payment agents are already ISO-compliant, and therefore it can be said that almost all of the foreign investment companies can now be reached via ISO 20022 messaging.

The picture is different if we look at the domestic volumes of the operations exchanged between payment agents and distributors: as this distribution typically has an open architecture framework, it would be logical to expect an extensive use of ISO 20022, however the scenario is inconsistent. Some payment agents have migrated a large part of their volumes, while others are still at a stage in which the volumes are limited (see KPI2).



One positive factor is the 12-month growth forecast, which is 94%.

With regard to the cross-border market, and therefore the relationship between the payment agent-transfer agent/Sicav, it can be seen that there are significant results in terms of the use of the ISO 20022 standard via Swift, which is a common and heavily used mode of communication.

From the point of view of operational processes, certain payment agents who are particularly attentive to service levels and the automation offered to their customers, are now analysing and implementing the model for the transferability of Funds units, both in the phase that involves the exchange of information between the distributor and the payment agent, and in the phase between the payment agents themselves (e.g. tax data).

The results expected from the implementation of this model are greater operating efficiency and a significant reduction in the transfer times, to the benefit of the end investor.

For both types of fund (Italian and round-trip/foreign), the first two indicators have been shown (AUM percentage reachable via ISO 20022 and the percentage of orders exchanged via ISO 20022) also considering a 'closed' community composed only by the participants who joint the Observatory.

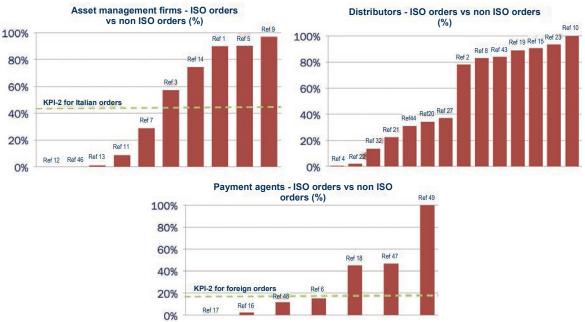
With regard to the same indicators for the whole market, the scenario does not significantly change. The values of AUM – currently – go from 58%-63% on the Italian funds, while on the transaction volumes, the figure rises from 42% to 44%. The situation is similar for the 12-month forecasts.

The figures for the foreign and round-trip funds have not been shown, as the participants in the Observatory represent the whole of the market (payment agents) and therefore the percentages do not change.

It is interesting to look at the trends in ISO operations, by type of counterparty. The figure below shows the picture for the percentages of adoption of ISO messaging for asset management firms, distributors and payment agents, respectively.



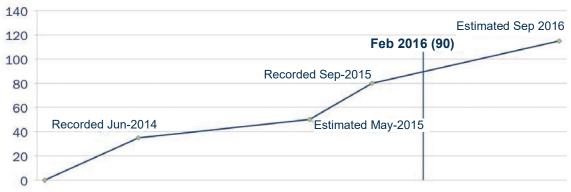
Figure 3
Orders received with ISO 20022



The above graph shows that the community contains a large number of "virtuous" intermediaries in all categories (distributors, payment agents and asset management firms), which have already concluded a significant process of adopting the standard, with percentages of usage of ISO 200022 messaging exceeding 70-80%.

During the project life cycle, close attention is always paid to the level of implementation of the Standard. The KPI-3 refers to the growth in the 20022 operations (orders). The figure below shows the trend by combining two specific surveys (questionnaires of June 2014 and September 2015) and two estimated measurements (May 2015 and September 2017).

Figure 4
Number of ISO 20022 orders on a daily basis (in thousands)



The figure recorded in September 2015 shows an average of 80,000 ISO operations exchanged daily between distributors and asset management firms/distributors. The growth compared to the June 2014 survey is 128%.

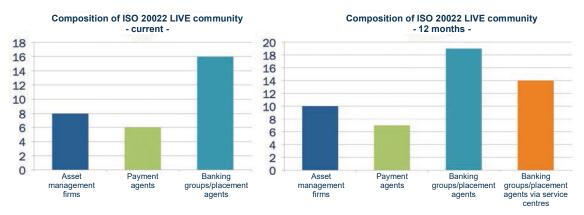
The estimated growth expected at five months (September 2015-February 2016) was 12%, with an average number of operations of 90,000.



The growth expected at 12 months according to the survey (September 2015-September 2016) is 43%, was 120,000 operations.

Another view of the level of ISO 20022 adoption can be taken from analysing the size of the community that has implemented the Standard or is expected to do so within the next 12 months. This is the case of the KPI-4 shown in the figure below.

Figure 5
Composition of ISO 20022 community



The national community which is active in ISO 20022 comprises 30 entities (banks/banking groups, asset management firms and payment agents).

The 12-month forecast will see a potential growth in the representation of banks and banking groups, with particular significance for those banking entities that use outsourcers.

The outsourcers that support banking intermediaries with their technology structures and operations will be fundamental in enabling the extensive use of ISO 20022 messaging in the immediate future.

The expected 12-month growth of asset management firms is numerically limited, but it is significant in terms of the new AUM that can be reached through the standard.

The expected 12-month growth in payment agents is numerically not significant, as the market for payment agents contains a limited number of entities that already support ISO 20022 messaging.

FINAL CONSIDERATIONS

The route towards the adoption of the Guidelines will involve a slow process of converting from the proprietary technical and operational methods to an approach based on sharing global experience as a common denominator to generate benefits and economies of scale, in favour of the community and also of the individual.

The model represented by the Guidelines is constantly evolving. Thanks to the contribution of the intermediaries, it is constantly updated in order to support new operations or regulatory changes.

Although the process of transformation cannot be considered to be complete, the



current extent of use of the standard has resulted in the construction of a modus operandi based on the sharing of experiences & progress, and has made solid foundations for a continuation of the irreversible transformation process.

The adoption of the ISO 20022 standard is just the first link in a chain that will lead to efficiency.

The messaging layer is the basic element on which new operational models can be built, and therefore it is the foundation for the expected level of efficiency.

A practical example is the many initiatives developed over the past two years which have seen the definition of datasets for the AML, FATCA and CRS data, the drafting of a standardised initial subscription form, which can be used for Italian funds and SICAVs, and the preparation of a process for the transferability of shares involving distributors, asset management firms and payment agents.

In the interests of the community itself, the process of adopting the Standard needs to be continued, with the constant support of the associations, by drafting (based on the intermediaries' own characteristics), a master plan that will facilitate the adoption of the Guidelines by those counterparties who are not yet present.

... only at that point will we be able to say that we have made modest contribution towards real progress.