

# **ISSA**



**Annexes**

to the Report

**Investment Funds Processing in Europe**

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## **Annex A**

### **European Fund Database: March 2008 industry roundtable participants**

The industry roundtable discussion with senior representatives from leading financial instrument data providers was hosted by SWIFT at La Hulpe, on March 7, 2008

#### **ISSA Fund Working Group members**

- Edouard de Lencquesaing (Chair)
- Sebastien Chaker, BBH
- Anne-Sophie Remacle, Citigroup
- Philippe van Hecke, Clearstream
- James Kiernan, DTCC
- Lieven Libbrecht, Euroclear
- Jean Sonnevillle, SWIFT
- Sven Bossu, SWIFT
- Erhard Heumann, UBS
- Peter Gnepf, UBS / ISSA Secretariat

#### **Guest participants**

- Dominic Leblanc, Fininfo
- Carsten Mahler, FundConnect
- Mario Mantrisi, KNEIP Communication
- Nourredine Yous, Telekurs Financial Information
- Rudolf Siebel, EFAMA and German Investment and Asset Management Association BVI
- David Broadway, EFAMA and UK Investment Management Association IMA

#### **Invitations extended / discussions held separately**

- Dominique Valschaerts, Finesti (formerly CCLux)
- Marie Helène Créto, NYSE Euronext
- Max Baumann, Swiss Fund Data AG
- Steven Kundermann, WM Datenservice

## Annex B

### EFAMA Fund Passport Process - a proposal by SWIFT

#### Fund Processing Passport Proposal for the creation of a single window



#### Goal of this document

This document gives a high level description of a possible distribution model for Fund Processing Passport and will function as working document during discussions with the different stakeholders involved.

The document is structured as follows:

- executive summary
- assumptions taken
- model description

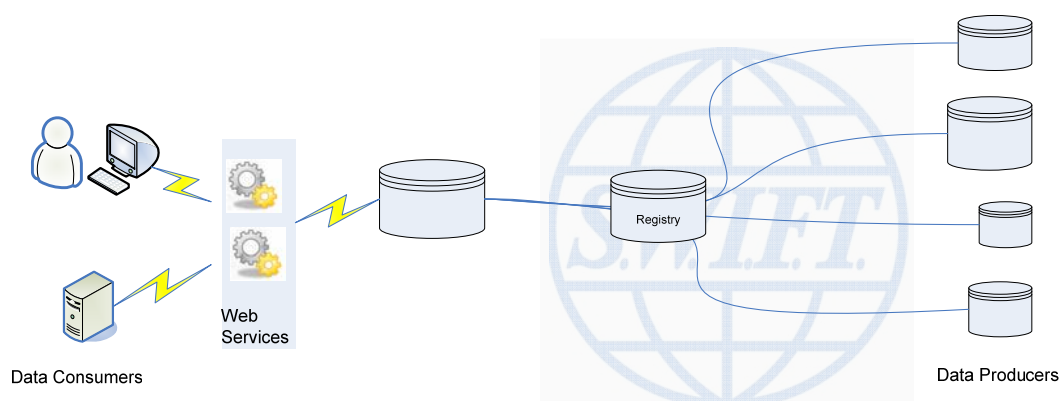
#### Executive summary

The Fund Processing Passport is becoming a reality. A growing number of – large – fund promoters have created the passports for their fund range or are in the process of doing so.

The next step consists of making this standardised operational information available to the fund industry. Several initiatives have been taken to do so, either by market or by companies offering specific services around the FPP.

From a user point of view, the concentration of standardized operational data with a limited number of sources is a positive evolution compared to the current situation. Ideally, this situation should evolve towards the creation of a single window, offering the user the possibility to obtain – in one format, via one channel – fund processing passports held in different locations.

This document described how such a single window might function, using SWIFT as a distribution network. From a high level point of view, the model looks like this:



In the proposed model, SWIFT would manage a Registry and organise the exchange between the data consumers (Fund Distributors) and the data producers. The data consumers will access the data through SWIFT.

This model is a collaborative model:

- the data producers take advantage of accessing a broader market
- the data consumers have a standardised access to a large information set
- SWIFT is organising the exchanges.

This proposal has been developed with first objective to provide “seamless interoperability” to our users: a business application should easily access a FPP as if it was a “local data asset”, without knowing much about the source of the information.

The second objective is “genericity”: the proposed solution is not specific to FPP and can serve to support many other reference data services. A FPP is a Data Item and the infrastructure to be developed could be reused for many other Data Items.

### **Assumptions**

Two assumptions have been taken while defining this model:

1. a set of best practices on the roles and responsibilities of the different stakeholders throughout the lifecycle of the FPP have been defined and agreed upon by the fund industry (you will find a proposed set of practices at the end of this document);
2. the service offering of SWIFT in this model must be complementary to the service offer of other FPP service providers.

Both assumptions should be considered as *conditio sine qua non*: it is highly improbable that a collaborative model for the distribution of FPPs can be set up if these are not met. It is advisable to go through the best practices at the end of this document, before continuing.

### **Description model, actors and processes**

#### High level description model

The aim of the model is to provide data consumers – which are mainly fund distributors – with a single window for the collection of FPP data, which is provided in one format. Both aspects – single window and single format – are two of the three critical success factors (the third one being a sufficient number of available FPPs).

The data consumer has two possibilities: either he wants to store FPP data at his level – in which case he will need to update the data – or he will consult the data on an “on line” basis, for immediate use. In both cases, SWIFT will receive a request for information, which should be specific enough to collect the information required by the data consumer. The request will be made specific by applying a set of criteria which are elements of the FPP. Examples would be ISIN, Name Management Company, etc.

At the moment SWIFT receives the request, a registry will be consulted. This registry holds the location of each available FPP. Please note that only one location will be considered – given the principle of single ownership, as explained in the best practices.

SWIFT will then collect the information from the location(s) concerned and provide the information collected to the data consumers. If the location of the FPP is not registered, a message is sent to the party requesting the information. The registry itself – which is of key importance - is maintained by the different data producers, assuming responsibility for the correctness of its content.



tion server will determine which Subscribers need to be synchronised with which Publishers. The synchronisation process can be triggered by a subscriber, a publisher or any event (a timer, the set up of a contract...). This synchronisation mechanism can be used to synchronise any kind of data.

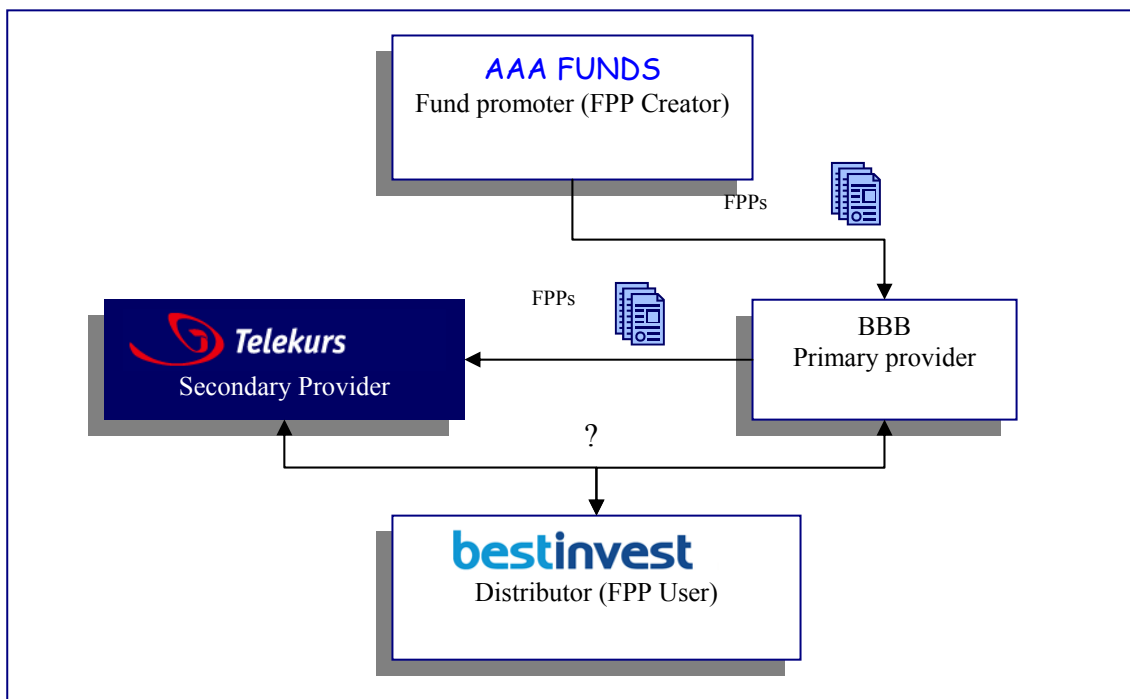
## FPP BEST PRACTICES

### 0. Approach

The description of roles and responsibilities will be based on the following lifecycle of the Fund Processing Passport:

- Initial creation
  - creation of a FPP by the FPP owner;
  - posting of a FPP at a database or with a data vendor;
  - publication of a FPP via a database or via a data vendor;
  - distribution of a FPP to FPP users.
- Update
  - update of a FPP;
  - posting of an updated FPP;
  - publication of an updated FPP;
  - distribution of an updated FPP
- Closure
  - closure of a FPP by the FPP owner;
  - request the removal of a FPP from a database;
  - removal of a FPP from a database;
  - notification of the closure of the FPP to the FPP users.

As for the processes: throughout this document, it will be assumed that FPP users either collect FPP data from a data vendor who also collects FPPs (= primary provider in the scheme below) or from a data vendor who collects FPP data from a secondary provider.





## 1. Principles of ownership and golden copy

Before describing in detail the lifecycle of the FPP, it is important to describe the principle of FPP ownership, which will be one of the cornerstones of the best practices framework described below.

The content of the FPP is owned and can only be owned by one entity. In the scheme above the owner of the FPP concerning the fund range of AAA Funds is AAA Funds Investment. Ownership means that AAA Funds Investment is accountable for the content of the FPPs which related to the investment funds of AAA Funds. AAA Funds investment is also the only party who can modify the content of these FPPs.

Please note that this accountability is not unlimited: AAA Funds can only be accountable for those processes which it fully controls (this will be described in detail below).

Related to the principle of FPP ownership is the principle of the golden copy of a FPP. A golden copy is the latest, most up to date, version of a FPP. It is this FPP which should be used for initiating any investment in the underlying sub-fund. In principle, the golden copy is held at the level of the FPP owner. However, it might be possible that this golden copy is not accessible on the level of the FPP owner. In such a case, the golden copy should be made available via a Primary Provider, which in this case would be BBB.

The combination of FPP ownership, the concept of the golden copy and the fact that this golden copy should be available raises a point of attention: it should be known to any party interested in a FPP where to find the golden copy of the FPP concerned. This information should be made available centrally.

## 2. General principle of accountability

In general, the FPP owner is accountable for the content of the FPP and for providing this content correctly to the party who will make the information public (the primary provider). The latter is responsible for publishing the received data correctly and timely. As to the aspect of timing, a difference should be made between an initial publication of a FPP (where the primary provider is to publish on reception) and the publication of an updated FPP (where the updated FPP should be published on the date the update enters into effect).

This general principle will be detailed below if required.

## 3. Initial creation of a FPP

The first phase of the lifecycle is the initial creation of the FPP. This phase goes beyond the creation as such: it also includes its publication and posting.

### 3.1. Creation of a FPP by the FPP owner

In principle, it will be the FPP owner – in our example AAA Funds Investment – who will create the FPPs. Nevertheless, it is possible that the FPP owner calls upon another party – for example the Transfer Agent – for actually creating the passports.

It should be considered as best practice that in such a case, the fund promoter – in spite of the fact that another party will be in charge of the creation – remains accountable for the content of the FPPs vis-à-vis other parties involved. This can of course be backed up with a contractual agreement between the fund promoter and the party in charge of the creation of the FPPs.

As to the format: the FPP created should respect the FPP standard as defined by EFAMA and contain as an absolute minimum the mandatory fields, as defined by EFAMA in collaboration with the working group. It should also respect the format of the fields, if such a format has been defined by EFAMA.

### 3.2. Posting of the FPP at a database or with a data vendor

Once the FPP is created, it should be made available. To this purpose, the FPP owner can post the FPP on its own database or with a data vendor, as long as a party interested in obtaining the FPP can have access to it.

It is clear that FPP owner can opt to post their FPPs on different location. In our example, AAA Funds can decide to post FPPs on their own website and to make the FPPs available via BBB.

As to the technical format to be used for posting the FPP with a data vendor: this is subject to the arrangement between the FPP owner and the data vendor in question, but it should be in a format which allows the data vendor to respect the best practices with regards to the publication of the FPP, as described in the next paragraph.

#### **Note on accountability**

The posting of the FPPs can lead to a shift in accountability. If in our example, AAA Funds Investment decides to post its FPPs at BBB, the accountability of AAA Funds Investment is limited to providing the correct FPP data to BBB in a format which allows BBB to respect the publication best practices and to verifying that BBB has received the FPP data correctly. The latter can be achieved by giving the FPP owner a pre-view before the FPPs are actually published. In our example, BBB might give AAA Funds Investment an access to its database for verification before the FPPs are actually made available via the website of BBB or any other distribution channel used.

However, AAA Funds can not be held accountable for the same process which exists between BBB and Telekurs as it does not have any control on this process.

### 3.3. Publication of a FPP via a database or a data vendor

The next step consists of publishing the data in order to make it available to any party interested. This should be done via an on-line channel which is freely accessible (both in the sense of free of charge and the sense of unrestricted read-only access).

The FPP data should be published in such a way that:

- it allows to find and select a FPP by applying following set of criteria
  - ISIN code (field 1)
  - Name of fund including class (field 2)
  - Name of umbrella (field 3)
  - Name of fund management company (field 13)
  - BIC of fund management company (field 19)
- it allows to visualise the selected FPP
- it allows to download the selected FPP in a format which can be exploited (the preferred format would be XML) and which respects the FPP format as defined by EFAMA.

### 3.4. Distribution of a FPP to FPP users

Next to publishing the FPPs, as described above, FPPs might also be distributed actively (in a push mode as opposite to pull). To this purpose, the primary provider (whether this is the FPP owner or a data vendor) should foresee in a subscription mechanism allowing the FPP user to define a set of requirements.

If we go back to our example: assume that AAA Funds publishes its FPPs with BBB and that BBB is the primary provider (= location of the golden copy). In this case, Bestinvest, which is the user of the FPPs, should have the possibility to subscribe to all FPPs related to AAA fund range or to a subset of

this range. If AAA Funds would then publish a new FPP which matches with the criteria defined by Bestinvest, BBB should push the FPP in question to Bestinvest.

The channel to be used for the active distribution of FPPs will depend on the arrangement between the primary provider and the user, but should allow to provide the user with the FPP data in a format which can be exploited on his level (the preferred format would be XML).

The message should contain – next to the FPP data – the notion that it concerns a new FPP which matches the criteria defined by the user. This is not the same as the notion of an updated FPP, which will be dealt with further in this document.

The accountability for defining and maintaining the criteria to be applied < a standard list should be defined by the working group > lies with the user. The accountability for storing and applying these criteria and dispatching FPP data with matches these criteria (including the notion “new”) lies with the primary provider. The accountability for capturing the dispatched FPP data and integrating it lies with the user.

Please note that this scenario is only valid when Bestinvest collects FPP information directly from the primary provider. If Bestinvest collects its FPP information via Telekurs, it will be up to Telekurs and Bestinvest to define a governance for the distribution of information.

#### **4. Update of a FPP**

This phase basically goes through the same steps as the previous phase. The description below will only deal with those aspects which are specific for an update.

##### 4.1. Update of a FPP

As mentioned above, the content of a FPP can only be changed by one entity, in our example AAA Funds Investment. If we look at it from a bottom up approach however, it will be impossible for Bestinvest to know whether the source of the updated information is AAA Funds Investment or whether BBB has changed the content (for any reason whatsoever).

Therefore, it is important to register any changes on two levels: at the level of the FPP owner and on the level of the primary provider (which might, but not necessarily, be the FPP owner). Both levels should be able to trace down any updates made in terms of the update itself (which content change has been made), time (when was the change made). At ownership level, it is recommended to be able to trace down the person who made the change.

##### 4.2. Posting of an updated FPP at a database or with a data vendor

Similar to the initial posting of a FPP, the posting of an update is subject to the arrangement between the FPP owner and the primary provider. However, in order to allow the primary provider to respect the best practices with regards to publication and distribution of FPPs, the posting process should trigger an “update alert” with the primary provider.

It should be considered as best practice that the FPP owner provides the primary provider with the complete updated FPP and not only with those data which are updated. The intelligence required for replacing the “old” data with the “new” data and identifying the change made should lie with the recipient, which on this level is the primary provider. The replacement of data should be triggered by matching Field 4 (Date of last revision to the Fund Processing Passport) of the received FPP with Field 4 of the FPP which populates the database.

Let us go back to our example to clarify this process, taking the assumption that AAA Funds Investment uses BBB as primary provider. AAA Funds will update the FPP on its own level and dispatch the complete updated FPP to BBB, according to the governance between AAA Funds Investment and

BBB. BBB will capture the updated FPP and match the data of last revision mentioned in the FPP received with the data of revision of the FPP already present in its database. If the revision date present comes before the revision data received, the two FPPs will be entirely matched to identify and register the change made before publishing the updated FPP.

As the accountability remains the same as for the initial posting of a FPP, the same checks and balances should be applied.

#### Note on timing

Certain updates might be known by the fund promoter long before they enter into effect. Take for example the change of a cut-off time for subscription. This is the type of change which is likely to be known at the level on the fund promoter weeks or even months before it is applied.

The key challenge is to make this updated information available to the user in time.

As to the publication of the FPPs, the matter is relatively simple: the updated FPP should be published on the first business day the change enters into effect, possibly considering the different time zones (if applicable).

As to the distribution of updated FPP, the matter is less simple because the timing of dispatch heavily depends on how the end user integrates the FPP data within its operational processes. Therefore, the subscription mechanism described above should allow defining whether updates should be dispatched to the end user on the date of effect or on the moment the change is known by the primary provider.

In order to make the above possible, the FPP owner should inform the primary provider on the date of effect of the update, according to the governance as agreed upon between FPP owner and primary provider. If no such date is provided to the primary provider, it should be considered that the change enters into effect immediately.

#### 4.3. Publication of an updated FPP via a database or a data vendor

This process is identical to the initial publication of a FPP but should consider the aspect of timing, as described above.

#### 4.4. Distribution of a updated FPP to FPP users

The process is identical to the initial distribution of a FPP. If a FPP with matches with the criteria defined by the FPP user is updated, this should trigger the dispatch of the complete updated FPP to the FPP user.

The message should contain – next to the FPP data – the notion that it concerns an updated FPP, which matches the criteria defined by the user. The intelligence required for replacing the “old” data with the “new” data and identifying the change made should lie with the recipient, which on this level is the FPP user.

### **5. Closure of a FPP**

The closure of the FPP, which is the result of the closure of the (share class of) investment fund or a merger with another fund, is a specific type of update, because it will mean that the FPP in question will should no longer be available.

#### 5.1. Closure of a FPP by the FPP owner

The decision to close a share class can only be taken by one entity, the FPP owner. The FPP owner should keep a copy of the FPP for archiving purposes and register the timing and the owner of the closure.

### 5.2. Request the removal of the FPP from the database

The FPP owner should ask the primary provider not to make the FPP available any more by providing the primary provider with the ISIN code of the share class for which the FPP needs to be removed.

The primary provider will – similar to any update – register the request for removal (both the request itself and the timing).

Also similar to other updates, the timing aspect might need to be considered.

### 5.3. Removal of the FPP from the database

The FPP should be removed from the database, respecting the timing (if any). From that moment on, the FPP will no longer be available to FPP users.

Any new request for the removed FPP should result in a message stating that the FPP in question has been closed.

### 5.4. Notification of the closure to FPP users

The process is similar to the dispatch of an update. If the FPP closed matches with the criteria defined by the FPP user, this should trigger the dispatch of a notification message to the FPP user.

The message should contain – next to the ISIN code of the share class closed – the notion that the share class is closed. The governance on how to deal with such an event at user level lies with the user.

## Annex C

### SWIFT's Role in the Funds Industry



#### 1. Involvement in the Funds industry

SWIFT is committed to help the funds industry automate and standardize its processes via the creation of ISO standards and messages, and by driving or assisting the development of international and local market practices.

#### 2. SWIFT usage by the Funds industry

Around 1000 financial institutions around the world are using ISO standards to process mutual funds transactions, resulting in over 25 million SWIFT funds messages in 2008.

SWIFT's initial focus on the cross-border fund processing has already shown encouraging results, more specifically in the Luxembourg funds industry : a recent study by SWIFT and Efama shows that the total automation rate of orders processed by Luxembourg transfer agents has grown by 7.6 percentage points to reach 66 percent in Q4 2008. Most of this growth (6.3 percentage points) comes from the ISO messaging standard adoption by fund market players. The percentage of automated orders based on the ISO messaging standard reached 41 percent in Q4 2008, with the remaining 25 percent representing automated orders based on bilaterally agreed proprietary formats.

65 percent of orders received by Luxemburg transfer agents are sent by order givers based in Europe, the Middle East and Africa. 30 percent come from Asia-Pacific and 5 percent from the Americas. Whereas ISO standardization rates reached 47 percent in the EMEA region and a similar 47 percent in the Americas, orders originated from Asia-Pacific reached only 8 percent ISO standardization.

These are promising results but still more can be done and the practical recommendations made in this report are an example of that. For most of the core processing functions that are detailed in this report, market practices and ISO messages exist and are available for immediate use to implement these recommendations.

#### 3. SWIFT in Practice

To help improve the automation and standardization of the fund processing industry in order to reduce risk, reduce cost and increase straight-through-processing, SWIFT provides

- Fund processing messages in ISO 15022 and ISO 20022 standards
- A migration plan from 15022 to 20022
- A contribution to market practices and correct usage of messages
- Easier connectivity solutions: SWIFT Alliance Lite

These four elements will be covered in more detail below:

a. MT messages (ISO 15022)

In early 2000 SWIFT was requested by several companies active in the mutual fund business to find a solution for standardizing communication primarily in the distribution of funds area (subscription and redemption of investment fund units). In the same year, so called 'Fund Templates' were developed for the ISO 15022 based trading message types:

MT 502: funds subscription and redemption order

MT 509: funds order status

MT 515: funds order confirmation

These messages are well known and used in the European funds industry. Their scope, however, is limited and they cover only one (order placement) of the six core processing functions described in this report.

SWIFT has also developed a far broader range of new XML-based messages under the new ISO 20022 standard, and a migration from 15022 to 20022 is underway (cfr infra).

b. MX messages (ISO 20022)

The ISO15022 based message types are restricted to certain core functionalities for fund processing. For this reason they do not support further fund specific processes such as opening accounts or supporting bulk orders. Therefore, SWIFT decided together with interested market participants to include the fund processes in the further elaborated ISO 20022 standard, to comprehensively model fund processes and to underlay them with a new, extended set of message types.

The result is a Process-Model for the processing of funds that was incorporated in the ISO 20022 Standard-Repository. The ISO certified process today forms the basis of a detailed set of new XML based UNIFI Funds message types. Since April 2004, the XML based UNIFI Funds message types can be used in the financial industry under the name of SWIFTNet Funds Solution. SWIFT continues to work on the SWIFTNet Fund Solution and to add further ISO certified message types, such as the recently added FPP messages.

The ISO certified process model for fund settlement is an integral part of all financial processes described in the ISO 20022 Standard Repository. This repository is extremely relevant for ISO's standardisation processes; it integrates different process areas and thus has become increasingly important for the entire financial industry.

The ISO-Standard-Repository consists of the following elements:

- The **ISO Data Dictionary** describes all information elements relevant for the messaging process.
- The **ISO Business Process Catalogue** includes the modelled fund business procedures.
- The catalogue also provides information on the **actors** involved in the relevant processes as well as details on the **information flows** relevant for the messaging process.
- Such **generalized processes** form the basis for the ISO-certification of message types.

The MX message suite enables the further automation of most of the core processing functions described in this report:

- Reference data
- Account opening and maintenance
- Order placement
- Transfers
- Holding and transaction reporting

FUNCTION	MESSAGE TYPE	DETAIL
Orders	Subscription (6 messages)	Order, Cancellation, Confirmation (idem for bulk orders)
	Redemption (6 messages)	Order, Cancellation, Confirmation (idem for bulk orders)
	Switch (3 messages)	Order, Cancellation, Confirmation
	Order status (3 messages)	Request for status report, Status report order, Status report cancellation
Account management	(4 messages)	Account opening instruction, Account modification instruction, Get account details, Account management status report
Price	Report, correction, cancellation (3 messages)	Price report, Price report cancellation, Price report correction
Fund processing passport	Request and report (2 messages)	Request for Investment Fund Report, Fund Processing Passport report
Cashflow forecast	Report and cancellation (6 messages)	Fund estimated cash forecast report, Fund detailed estimated cash forecast report, Fund detailed confirmed estimated cash forecast report, Fund confirmed cash forecast cancellation, Fund detailed confirmed cash forecast cancellation
Statements	Custody, Accounting, Transaction (6 messages)	Custody statement of holding, Accounting statement of holdings, Custody statement of holding cancellation, Accounting Statement of holding cancellation, Statement of investment fund transaction, Statement of investment fund transaction cancellation
Transfers	Instruction, Cancellation, Confirmation (11 messages)	Transfer out instruction, Transfer out instruction cancellation request, Transfer out confirmation, Reversal of transfer out confirmation, Transfer in instruction, Transfer in instruction cancellation request, Transfer in confirmation, Reversal of transfer in confirmation, Request for transfer status report, Transfer instruction status report, Transfer cancellation status report
	Portfolio transfers (5 messages)	PEP Or ISA Or Portfolio Transfer Instruction, PEP Or ISA Or Portfolio Transfer Confirmation, PEP Or ISA Or Portfolio Transfer Cancellation Request, PEP Or ISA Or Portfolio Information, Request For PEP Or ISA Or Portfolio Information
Alternative funds	Orders (5 messages)	Alternative Funds Subscription Order, Alternative Funds Redemption Order, Alternative Funds Subscription Order Confirmation, Alternative Funds Redemption Order Confirmation, Alternative Funds Order Instruction Status Report, Investment Fund Order Cancellation Request, Investment Fund Cancellation Advice V01
	Statement (1 message)	Alternative Funds Accounting Statement of Holdings

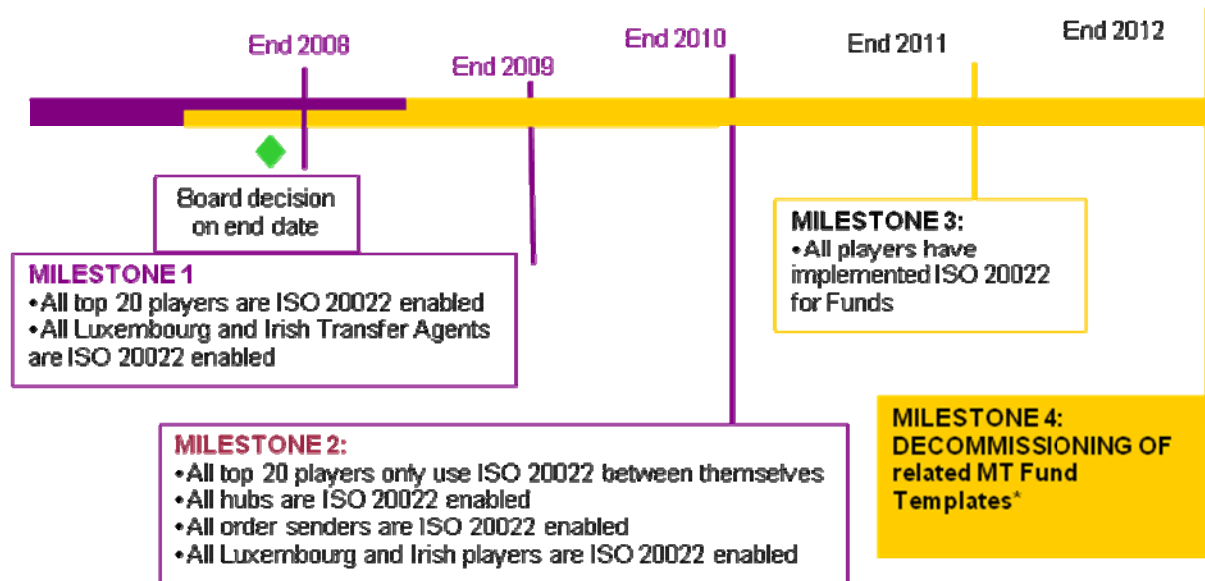


c. MT-MX migration plan and milestones

In today's environment the two message sets (MT 15022 and MX 20022) co-exist, and the SWIFT board has approved a migration plan for the industry that will end in December 2012 with the removal of the MT messages from the SWIFT messages.

Several migration milestones have been inserted in the migration process, and at each milestone date, SWIFT will evaluate the progress made so far and, if necessary, come up with corrective measures.

Milestones are described in the diagram shown below:



SWIFT provides a detailed monthly progress update to each of the top 20 players.

d. Market practices

Next to the ISO message development, SWIFT also participates as an active member in organizations such as the international Securities Market Practice Group (SMPG), the domestic NMPGs, Efama's FPSG (Fund Processing Standardization Group), ISSA's Fund Working Group, Alfi TA forum, Findel, AFAC and many others, and hence contributes to the establishment of international and domestic market practices that help improve automation and standardization, ensure human understanding of the data, reduce errors and help cost savings.

Some examples of market practices and operating guides include:

- SMPG: Global Market Practice for Investment Funds Order and Confirmation Processing.
- Switzerland: SCFS Investment Funds Operations Guide (SKSF)
- Luxembourg: Investment Fund Processing Guidelines (ALFI)
- Norway: Guidelines for implementing Dealing messages in Norway

All available market practice and message usage documents can be found on the Securities Markets Practice Group website ([www.smpg.webexone.com](http://www.smpg.webexone.com)) via the Investment Funds Market Practices link.

e. Easy Connectivity: Alliance Lite

To maximize the adoption of ISO messages by the funds processing industry, the barriers to entry ( cost and complexity) have to be brought down to a minimum level, allowing smaller sized players, be they fund distributors or transfer agents, to easily connect to the SWIFT network.

To achieve this goal SWIFT has developed ‘Alliance Lite’, an interface consisting of a simple USB security token that can be plugged into a standard PC equipped with an internet browser, which opens a simple and user-friendly tool to send and receive a limited set of SWIFT messages. Alliance Lite R1 already exists for another customer segment (corporate to bank) and a new version (Alliance Lite R2) is currently under development for Fund distributors and Fund Transfer Agents.

When

The pilot launch for R2 is planned for October 2009, and the final product should be ready by the end of 2009.

What

Alliance Lite R2 will include:

- A subset of Funds MX 20022 messages: order, status, confirmation, statement of holding messages
- A subset of settlement MT 54x messages as well as the MT535 statement of holdings message
- A subset of Payments, cash statement and Forex messages (already available in Lite R1 )

How

The above mentioned SWIFT messages can be generated by:

- Manual input via a GUI (user friendly graphic user interface)
- Pre-formatted csv file upload (e.g. Excel files) which will be automatically converted into SWIFT messages

Pricing

Choice between to pricing models:

- Flat Fee of 850 € / month allowing to send and receive 200 messages per day, corresponding to approximately 65 fund orders per day
- Pay as You Go: 200 € / month + 1€ per message sent or received

# SWIFT for Fund Distributors

*Your first choice for fund processing automation*



*SWIFT brings you global connectivity, re-usability and scale with minimised cost and risk*

### Benefits

- One global connection
- Increased flexibility and scalability
- Reduced operational costs and risks
- Improved customer service:
  - Better reporting
  - Reconciliation
  - Cut-off management

### Reduced operational costs and risks: no more faxes, no more manual errors

SWIFT's standardised, automated solutions for fund processing enable you to eliminate fax communication and the risk of errors inherent in heavily manual processes. In the current economic environment, SWIFT is key to cutting operational costs and reducing operational risks, boosting operational efficiency and improving your bottom line.

### One connection globally: streamlined communication with all your counterparts

When you sign up for SWIFT, you join a community of more than 1000 fund industry players worldwide already taking advantage of SWIFT's standardised solutions for funds. Using SWIFT, you can have one connection to all these players worldwide, eliminating the need to monitor and maintain multiple FTP channels. You can also reduce the time it takes to connect to a new transfer agent or hub to a matter of days - which means you can provide a highly flexible fund offering to your customers.

### Flexibility and scalability: an infrastructure that accommodates your changing needs

SWIFT's fund solutions cover all products – mutual funds, hedge funds and money market funds, including in the corporate pension space – and the complete processing chain, from order placement and cash settlement, to cash flow forecasts, transfers, price reports and statements. You can also re-use your SWIFT infrastructure to automate other processes, such as clearing and settlement, corporate actions, payments, treasury management and foreign exchange.

As your business changes and grows, SWIFT can accommodate your evolving requirements, and the value you derive from your investment increases over time.

Automating your fund processing via SWIFT also enables you to accommodate volatile volumes smoothly, avoiding the need to scale up expensive manual resources to cope with spikes in activity. SWIFT's pricing reflects your levels of use, providing a 'pay as you go' model.

.....  
 “Before we had SWIFT, we had proprietary terminals all over the place. Staff needed to be trained on all the different systems. Now, we simply have one system.”

SWIFT customer  
 .....

**Improved customer service**

Automating order capture and reporting eliminates errors and enables information to be transported in a timely and secure manner, with guaranteed delivery. Distributors that have implemented SWIFT for order placement have been able to extend sales cut-off times in their branches as the burden of manual handling is removed. Distributors can provide better and timely reporting to their clients.

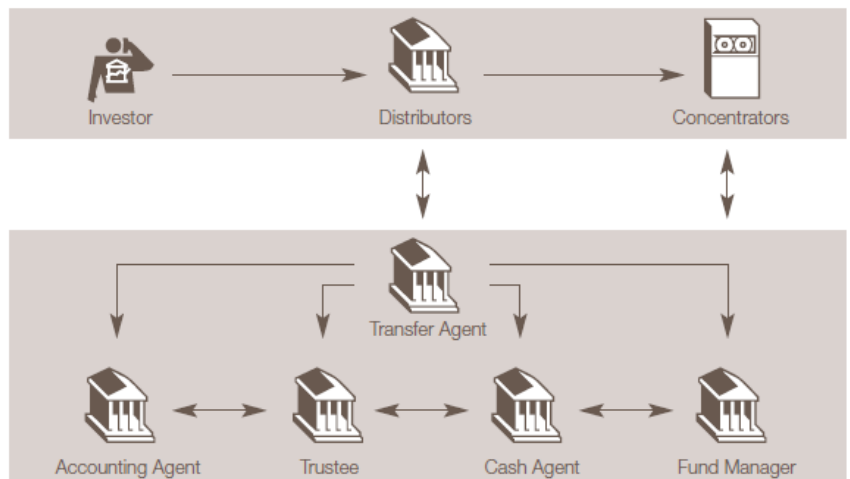
.....  
**“SWIFT is definitely a scalable solution. We could double our volumes without noticing.”**  
 .....

SWIFT customer

**Training**

SWIFT offers a range of classroom and onsite training and e-learning products, specifically tailored to meet your business needs – including the course “Investment funds – ISO 20022 messages”. Visit [www.swift.com/training](http://www.swift.com/training) for a complete list of available courses.

*For more information on SWIFT’s fund solutions, please contact your account manager, email [funds@swift.com](mailto:funds@swift.com), or visit our website, [www.swift.com](http://www.swift.com)*



Ⓐ SWIFT connectivity, standards and messaging

**SWIFT in figures**

- In 2008, SWIFT delivered more than 25 million fund messages
- More than 1000 fund players in 76 countries are already using SWIFT
- The average message cost per subscription/redemption is less than EUR 0.10
- The new ISO 20022 based SWIFT solution for funds can reduce costs further – by 40%
- SWIFT’s network availability is 99.998%
- SWIFT offers 24/7 customer support

# SWIFT for Transfer Agents

*Your first choice for fund processing automation*



*SWIFT brings you reach and scale with minimised cost and risk*

## Benefits

- one secure, low-cost global connection
- Flexibility and scalability
- Reduced operational costs and risks
- Improved customer service
  - Better reporting
  - Reconciliation
  - Cut-off management

### **Reduced operational costs and risks: no more faxes, no more manual errors**

SWIFT's standardised, automated solutions for fund processing enable you to eliminate fax communication and the risk of errors inherent in heavily manual processes. In the current economic environment, SWIFT is key to cutting operational costs and reducing operational risks, boosting operational efficiency and improving your bottom line.

### **One secure, low-cost connection globally: streamlined communication with all your counterparts**

When you sign up for SWIFT, you gain access to more than 800 fund distributors and platforms and 200 fund managers worldwide – including in Asia - already taking advantage of SWIFT's standardised solutions for funds.

SWIFT gives you one secure, low-cost channel for communication with all your distributors and hubs.

### **Flexibility and scalability: an infrastructure that accommodates your changing needs**

SWIFT's fund solutions cover all products – mutual funds, money market funds and hedge funds, including in the corporate pensions space –and the complete processing chain, from order placement and cash settlement, to cash flow forecasts, transfers, price reports and statements. You can also re-use your SWIFT infrastructure to automate other processes, such as clearing and settlement, corporate actions, payments, treasury management and foreign exchange.

As your business changes and grows, SWIFT can accommodate your evolving requirements, and the value you derive from your investment increases over time.

Automating your fund processing via SWIFT also enables you to accommodate volatile volumes smoothly, avoiding the need to scale up expensive manual resources to cope with spikes in activity. SWIFT's pricing reflects your levels of use, providing a 'pay as you go' model.

.....

**“Without SWIFT, we would certainly need to double the number of operations staff. Fluctuations in business cycles would cause problems, because we would have to pull in temporary staff. This would increase the risk and further reduce efficiency.”**

SWIFT customer



**Improved customer service: guaranteed delivery, guaranteed identification of counterparts**

SWIFT guarantees the delivery of your messages, and provides an indisputable timestamp. SWIFT also guarantees the identification of senders and receivers of messages – giving you 100 per cent certainty as to the identity of your counterparty.

With SWIFT, you can also connect to new counterparties in a matter of days.

.....  
**“SWIFT allows us to position ourselves for an increase in dealing volumes, without having to increase headcount.”**

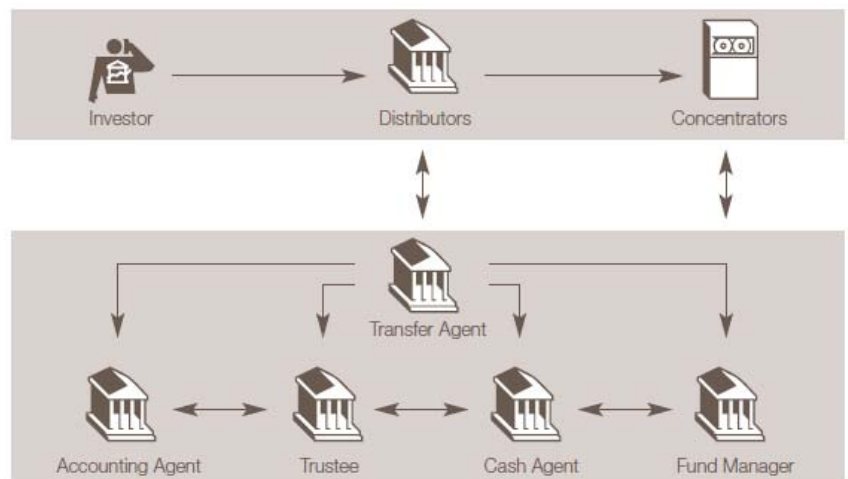
SWIFT customer

.....

**Training**

SWIFT offers a range of classroom and onsite training and e-learning products, specifically tailored to meet your business needs – including the course “Investment funds – ISO 20022 messages”. Visit [www.swift.com/training](http://www.swift.com/training) for a complete list of available courses.

*For more information on SWIFT’s fund solutions, please contact your account manager, email [funds@swift.com](mailto:funds@swift.com), or visit our website, [www.swift.com](http://www.swift.com)*



Ⓐ SWIFT connectivity, standards and messaging

**SWIFT in figures**

- In 2008, SWIFT delivered more than 25 million fund messages
- More than 1000 fund players in 76 countries are already using SWIFT
- The average message cost per subscription/redemption is less than EUR0.10
- The new ISO 20022 based SWIFT solution for funds can reduce costs further – by 40%
- SWIFT’s network availability is 99.998%
- SWIFT offers 24/7 customer support

## Alliance Lite for Fund Distributors

*Easy, low-cost automation solution for low order volumes*



*Your single automation solution to reach transfer agents and hubs*

### Benefits

- One solution to reach all your counterparties
- Easy to install and use
- Low cost
- Enhanced service levels, including:
  - Pending orders tracking
  - Timely reporting
  - Easy reconciliation
- Reduced operational risk and costs

With Alliance Lite you can easily access all your major fund counterparties through one single connection, with enhanced service levels compared to fax.

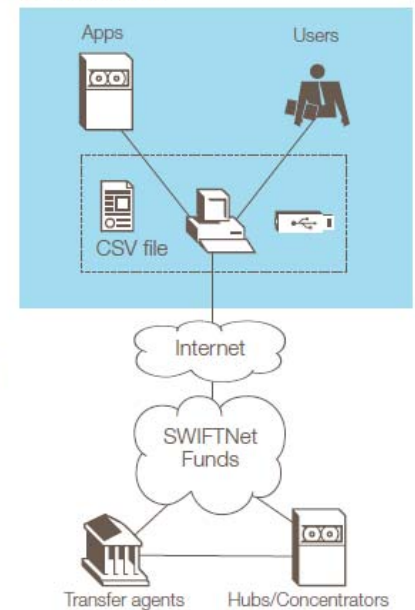
### Why automate fund order flows?

Faxing orders, even with a fax server, has a cost impact that is usually greatly underestimated. Studies performed at distributors have shown that order processing costs vary from between a few Euros per order (in countries where labour costs are low) up to EUR 50 in most cases. These studies do not take into consideration the additional cost of fixing errors and processing claims, involving senior management and legal teams on top of the investigation teams required to work on the errors.

Manual intervention, whether for sending or receiving orders, also creates significant risk - including the risk of fraud. Service levels from transfer agents and towards your customers are also diminished.

Leveraging Alliance Lite to communicate in an automated way via SWIFT with your fund counterparties efficiently addresses these issues at an affordable price - using a single solution that is used by transfer agents and hubs.

### Alliance Lite



### What benefits will you gain from automating on SWIFT?

Automating on SWIFT enables you to reduce operational risk, deal smoothly with volume peaks, and track your pending orders. SWIFT also acts as a trusted third-party providing time stamps and an audit trail during the full order lifecycle.

**What are the key features of Alliance Lite for fund distributors?**

- **Single connectivity:** A major benefit of Alliance Lite is that it offers common connectivity to communicate with transfer agents and fund platforms (hubs).
- **Easy to deploy:** You just need a standard PC with a standard internet connection, an internet browser, and a USB port for the SWIFT-issued hardware security token.
- **Easy to use:** Alliance Lite supports manual entry and display of commonly used orders, as well as integration with business applications, using CSV files. There is no need to train users on ISO standards: common language is used on the GUI input screens and reporting and file upload/download is in simple CSV pre-defined format.
- **Secure and reliable:** Alliance Lite is highly secure, meeting the very stringent SWIFT security standards for financial messaging.
- **Low cost:** Alliance Lite is a cost effective route on to SWIFT for fund distributors with smaller volumes.

*Additional information on Alliance Lite is available on [swift.com/alliancelite](http://swift.com/alliancelite). For more information on SWIFT services for funds, email [funds@swift.com](mailto:funds@swift.com), or visit our website, [www.swift.com](http://www.swift.com).*

By automating on SWIFT, order confirmations are received earlier than when they are faxed, and you can benefit in some cases from better cut-off times. The reconciliation process is also enhanced, enabling more efficient management of commissions.

SWIFT is the financial industry-owned, trusted messaging solution for payments and securities flows. Our Funds solution is already used by around 1,000 fund players in 76 countries, with over 25 million fund messages carried in 2008.

Alliance Lite offers an easy, low cost route to join this community and automate your funds distribution business with transfer agents and hubs.

**How much does Alliance Lite cost?**

Alliance Lite works with two possible pricing schemes:

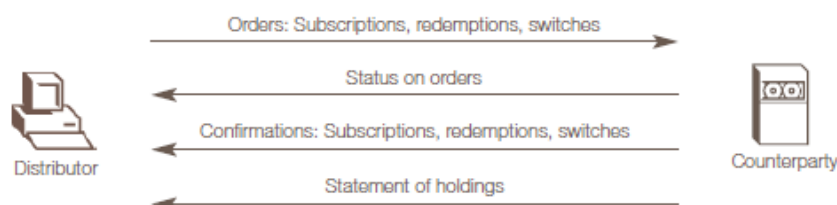
- A variable cost scheme:  
EUR 200/month + EUR 1 per message
- A fixed 'all-inclusive' cost scheme:  
EUR 850/month

For this price, distributors can exchange up to 4,000 messages per month – corresponding to around 1,300 fund orders per month (1 order equals 3 messages on average).

**What business can I conduct over SWIFT using Alliance Lite?**

Distributors using Alliance Lite can send orders (subscriptions, redemptions, switches). They can receive:

- statuses on pending orders (enabling prompt reaction before cut-off time when required)
- order confirmations promptly after valuation
- statements of holdings for reconciliation purposes. Distributors can also use Alliance Lite to connect to SWIFT for the automation of other business flows, such as cash payments and related reporting with their cash correspondents.





## Case study



Grupo  
Ahorro Corporación

## AC Gestión opts for SWIFT ISO 20022 to support its funds guided architecture business growth

“Starting with ISO 20022 was like having a Ferrari as your first car, just after getting your driving licence: we got access to the most advanced functionalities from the start.”

Alberto Martínez Pérez, Head of Funds Operations, AC Gestión

### Benefits

- ROI : 337% over 5 years
- Breakeven: 6 months after launch
- Operational risk: 95% reduction in number of claims/incidents
- Operational cost: 85% order processing time reduction

### Background on AC Gestión

- Spanish fund distributor
- 1,000+ savings bank network
- Top 5 Spanish fund manager
- 150 employees

### Background to the fund project

- Guided architecture project launched in 2006
- 17 major crossborder fund managers
- Thousands of daily fund orders aggregated into 1520 high value orders to transfer agents (TAs)



### The business challenge

AC Gestión's success in opening up to third-party funds resulted in rocketing fund order volumes. It quickly became apparent that exchanging high volumes of orders by fax server with third-party agents was not a sustainable operational model for AC Gestión from the perspectives of operational risk, cost and service levels.

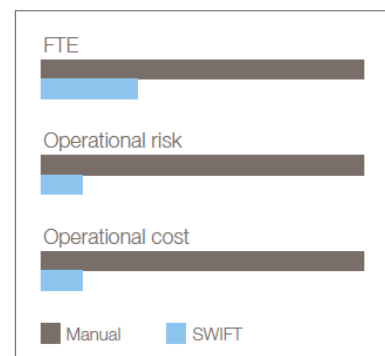
Automation and standardisation were required to enable AC Gestión's business to grow and encompass more fund houses.

### The objectives

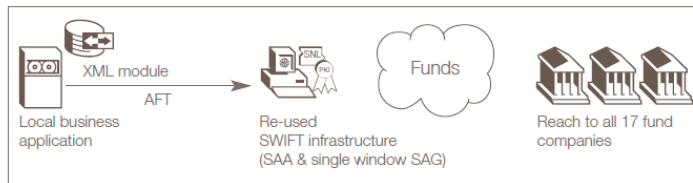
- Sustain business growth
- Reach all fund houses
- Track pending orders status prior to cut-off time
- Get guaranteed timely delivery of orders to TAs
- Minimise operational risks linked to fax
- Leverage current SWIFT infrastructure of the group

### The benefits

- Business expansion: easy reach to all fund houses and transfer agents.
- Operational risk reduction: minimised errors thanks to elimination of faxes, guaranteed timely delivery of orders and receipt of status messages.
- Enhanced scalability of operations: vital when volumes are very volatile.



▲ Benefits of SWIFT automation project



#### SWIFT implementation

- Cost reduction: through re-use of the Ahorro Group's SWIFT infrastructure already in place for its securities and payments businesses. In addition, aggregating multiple orders per SWIFT message (which is possible with ISO 20022) leads to a substantial reduction in traffic cost, beyond what is possible using FIN fund templates.
- Enhanced service level: through a reduced error rate and an extended fund offering.
- Cut-off times: going forward, improved cut-off times for incoming orders could be offered.

#### The project

AC Gestión started its project to implement SWIFT's ISO 20022 Funds solution in 2006. It was able to reuse the SWIFT infrastructure of its sister company Ahorro Corporación Financiera, meaning it could minimise IT infrastructure costs and achieve a faster time to market. Overall, it took fewer than 60 man days (nine months in elapsed time) to complete: about a third of that time was needed to accumulate the necessary XML expertise and build a module on its business application locally in order to generate the ISO 20022 messages, and to handle enquiries and reporting.

The remainder of the time was used for testing its integration with the central SWIFT infrastructure at its sister company and bringing on the first transfer agent (TA) counterparty.

#### The result

Since it has completed its first implementation, AC Gestión has been able to add all the required 12 TA counterparties much more easily and

quickly: it now estimates that adding a counterparty on SWIFT takes an average of three man days (two weeks elapsed time) and is fully automated on the SWIFT ISO 20022 fund service.

AC Gestión aggregates up to dozens of orders in one single SWIFT message. This is more cost effective than the "one order per MT" that applies to FIN users, meaning AC Gestión pays around 40% less in traffic fees. Faxes are used only for repairs before cutoff, and as a contingency. This has significantly reduced operational risk. AC Gestión sees a very powerful benefit in the automation of status messages, which confirm the content of an order is approved and will be executed. Most TAs generate status messages within minutes of order receipt, meaning they are received well before cut-off time, supporting timely identification and resolution of any problems.

#### Next steps

SWIFT's ISO 20022 Funds solution covers not only order flows, but all business flows for funds distribution. The next step for AC Gestión will be to automate additional operational flows using ISO 20022, starting with switches.

"Our SWIFT infrastructure supports multiple businesses in our group, and has become essential for the organisation. Once we implemented the core, adding new services has been relatively simple. We feel very comfortable with its reliability."

Pedro Soler, Organization and Systems Director,  
Ahorro Corporación Financiera

#### About SWIFT

SWIFT is a member-owned cooperative that provides the communications platform, products and services to connect over 8,500 banking organisations, securities institutions and corporate customers in more than 200 countries. SWIFT enables its users to exchange automated, standardized financial information securely and reliably, thereby lowering costs, reducing operational risk and eliminating operational inefficiencies. During the past 10 years, SWIFT message prices have been reduced by 80%, and system availability approaches 5x9 reliability – 99.999% of uptime.

*For more information please contact your SWIFT account manager or visit [www.swift.com](http://www.swift.com)*



# Supporting global funds distribution through SWIFT connectivity

## Schroder Fund Services Luxembourg

*Gary Janaway, Head of Operations at Schroder Fund Services Luxembourg, talks about how adopting SWIFT has aided fund distribution*

Gary Janaway led an initiative that enabled Schroders to do more business, more efficiently, in more countries, and at the same or lower cost. SWIFT played a key role in the initiative. This initiative involved connecting the funds unit of Schroder Fund Services Luxembourg to the SWIFT network, which was already in use in various parts of the business, such as the investment management arm for trading and corporate actions. The purpose was to improve distribution of Schroders (Luxembourg) funds by connecting fund distributors in an efficient, secure, standard and low cost manner. This enabled reductions in operation cost and risk, whilst extending our global distribution coverage. The primary objectives of the project are complete and Schroders has reaped a number of benefits. Nevertheless, the initiative is still evolving with plans to increase communications relating to cashflows to portfolio managers and transfers of account holdings.

### The goals

Schroders' investment funds division employed SWIFT for a number of reasons:

- To standardise communication protocols with distributors located across the globe
- Rationalise the number of file transfer protocol (FTP) connections and fax templates to reduce the associated high costs of maintenance
- Utilise the same network by which to instruct payments for both funds and segregated mandates
- To extend the range of automation to include other investment funds transactions, reporting, settlement, etc
- To increase operational gearing, maintaining headcount levels that allow a higher amount of time to be allocated to servicing clients (see graph)

*Adopting SWIFT has added fund distribution in Europe and Asia and helped reduce processing costs by 66%*



### • Number of funds distributed:

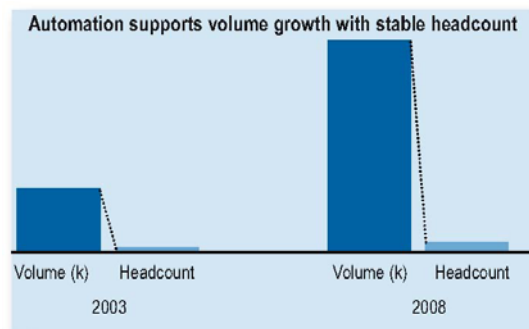
Eight fund vehicles with about 125 Sub-funds

• **Number of distributors:** Close to 5,000 distribution agreements but with circa 1,000 separate organisations distributing funds across the globe

• **Number of countries where funds are distributed:** 28

• **AUM:** Schroder Group €111.3 billion

• **Number of portfolio managers:** 335

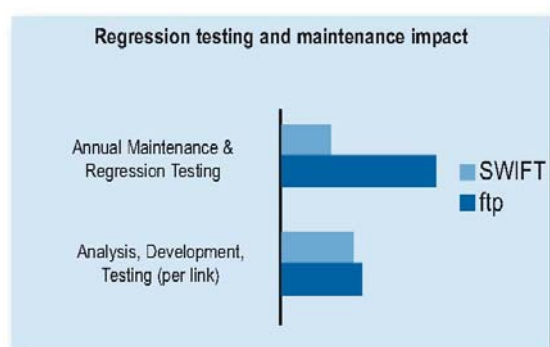


### Market evolution

Gary Janaway says: "Prior to using SWIFT we worked with distributors using proprietary communications

protocols (FTP) which were rarely standardised - for example, each would require their own internal account number. Whilst we were a pioneer on STP using SWIFT, we were dependent on counterparties being ready too."

The preparation process of formatting data fields in FTP files and performing the acceptance and regression testing is a long and cumbersome task. "If these distributors make changes to their systems they would want us to make similar changes to our systems to ensure that we are synchronised. This results in a heavy maintenance program. Similarly, if we make changes to our system, we would need to perform extensive regression tests to avoid impacting the content or timing of data files we send to distributors."



*Whilst connecting is an ongoing cost, regression testing and maintenance represent a significant proportion of the overall costs*

### Key benefits

#### Enhanced distribution channels

Schroder Fund Services Luxembourg chose SWIFT because most of the institutions worldwide already have access to the SWIFT network. Since 2002, the company has added circa five distributors per year, and is now adding upward of 10. This demonstrates that standards are converging.

Gary Janaway says: "A benefit for us is the access for our distribution division to distributors. Most of our European and Asian distribution is through banks, most of whom already use SWIFT in other parts of their organisations."

#### Enhanced client service and reduced processing time

"The use of technology to automate order management has directly reduced processing time. This enables any problem orders received from clients to be identified and corrective action to be taken. This directly reduces market risk and the cost of repair – be it for Schroders or our clients."

Gary Janaway says: "By contrast we used to receive a high level of faxed-based orders, the manual checking involved took longer, was less reliable and often could not be corrected for value on the day of receipt. This demonstrates the relationship between automation and high quality customer service."

Orders received via SWIFT require no manual intervention and pass initial processing in a matter of seconds. In contrast, manually processed orders require an average of four minutes SWIFT's low messaging tariff, the overall cost differential for either model is negligible. The cost of a SWIFT message can be as low as checking and typically would involve a team of people for several hours. This causes delays in identifying and correcting incomplete orders.

The deployment of SWIFT messaging in the fund services division allows more timely information to be provided to the fund managers in respect of cash moving into and out of the funds, assisting them in making short term investment decisions.

#### Network management

Automating orders via SWIFT also allows distributors to decide how to manage their networks, either centralising orders through one central desk, or operating from multiple sites.

"Our 20 largest order generators account for circa 80% of our order traffic," says Gary Janaway. "Some groups consolidate their orders, sending fewer in number but for a greater value. Each method offers different benefits to distributors and with SWIFT's low messaging tariff, the overall cost differential either model is negligible. The cost of a SWIFT message can be as low as a couple of euro cents."

#### Security & reliability

"We were looking for security. If you have a very reliable network, which is what SWIFT offers, you can send messages containing instructions and information 24 hours a day, seven days a week," says Gary Janaway.

#### The future

Schroder Fund Services Luxembourg's use of SWIFT is still evolving as part of its strategic program to automate processes and reduce costs.

Schroder Fund Services Luxembourg is now looking at using transfer messages with the single leg and extending the use of SWIFT by adopting foreign exchange messaging to their business and operational process.

*Orders received via SWIFT require no manual intervention and pass initial processing in a matter of seconds. In contrast, manually processed orders require an average of four minutes of checking*

## Annex D

### Fund Processing Passport – position paper by Finesti (formerly CCLux)



### Fund Processing Passport

FPP Services have been launched at Finesti on 30 January 2008 through an operation called «FPP on 30 January with CCLux»: Finesti announced FPP services available in collaboration with RBC Dexia (*«Services for Fund Processing Passports launched by CCLux, in collaboration with RBC Dexia Investor Services»*).

#### Finesti service offering

*«For promoters, one solution is the collection and publication of their own pre-prepared FPPs, the so-called "Golden Copies"; another is to outsource the creation and maintenance of the Golden Copy to the fund's service provider or CCLux, through a service based on its existing model for quality control and publication of fund data.»*

Current service offering could be summarized as follows:

#### **FPP Load & Publish**

FPP collection service for promoters (or delegates) including collection services, Golden Copy, change management, publishing and including into FPP networking data flows

#### **FPP Outsourcing**

Full-outsourced service where the promoter mandates Finesti to build FPPs by collecting data and obtaining final Golden Copy, to publish, distribute and disseminate FPPs (*FPP Outsourcing includes FPP Load & Publish service*).

#### **FPP Networking data flows**

FPP professional data dissemination services for distributors, fund processing operators, data vendors and other professional of Financial information.

#### **FPP on-line services**

Web portal services to give on-line access to FPPs under several policies, conditions and formats.

All FPP's covered by Finesti's services are published/downloadable for free on Finesti's website.



## I. FPP data dictionary

FPP is a compound set of data composed as follows:

- FPP core (77 data) as the main record of any FPP – FPP core is mandatory;
- FPP annex (28 data) as annex for specific country/distribution policies

FPP Dictionary	Mandatory	Optional	Comments
FPP core 77 data	59	18	
<i>Already managed by Finesti at quality level</i>	22	4	<i>Data already covered for other Finesti services</i>
<i>Available at Finesti but not already managed at quality level</i>	35	10	<i>Data available in prospectu- ses/documents/...</i>
<i>Not available</i>	2	4	<i>Countries registered for distribution Settlement accounts details</i>
FPP Annex 28 data	21	7	
<i>Already managed by Finesti at quality level</i>	1		<i>Data already covered for other Finesti services</i>
<i>Could be (or not) available at Finesti but not already managed at quality level</i>	18	3	<i>Data available in prospectu- ses/documents/...</i>
<i>Whatever Not available</i>	1	4	<i>Countries registered for distribution Settlement accounts details</i>

A large majority of the FPP dictionary is already managed or available at Finesti side:

- 34% of FPP data are already managed at quality level and ready for FPP
- 58% of FPP data are available but needs workload to be managed at FPP level
- 8% of FPP data are not available and must be found at promoter side

## II. FPP coverage in Luxembourg

Finesti and Kneip are active on FPP services in Luxembourg. Count as of July 6, 2009:

FPP in Luxembourg	Finesti		KNEIP	
	FPP	Promoters	FPP	Promoters
FPP <i>available on website</i>	633	9	1 027	6
Golden Copies <i>available on website</i>	633	9		
FPP waiting for approval <i>from promoters</i>	1 226	20	N/A	N/A
FPP waiting for additional data <i>settlement accounts details</i>	1 844	61	N/A	N/A

A large majority of these FPPs are Luxembourg domiciled funds (LU ISIN codes)  
(some GB for Investec at KNEIP, some DE for Union Investment for Finesti, ...)

### III. About ISSA Matrix and FPP matters

Let us consider the following table:

Support to operation	Current FPP	ISSA Matrix	TARGET	Comments
<b>From instrument to Market</b>				
<i>Instrument</i>			<i>KID</i>	
<i>Go to Market</i>			<i>KID</i>	
<i>Provide to distribution</i>	<i>X</i>		<i>FPP</i>	<i>Provided by asset managers</i>
<b>From Market to Operation</b>				
<i>Account Relation</i>				<i>Open/Maintain Relations</i>
<i>Order Placement</i>		<i>X</i>	<i>FPP</i>	<i>Many data useful</i>
<i>Order Execution</i>		<i>X</i>	<i>FPP</i>	<i>Some use/add-on</i>
<i>Settlement</i>		<i>X</i>	<i>FPP</i>	<i>Some use/add-on</i>
<i>Account Transfers</i> <i>Holding&amp;Transaction reporting</i> <i>Commission Reporting</i>				

FPP has been created by the asset managers to support the distribution of products.

FPP seems to be useful

- Significantly at distribution level (incl. order placement)
- Secondly while operation level (execution and settlement)

From mid 2011, UCITS IV shall impose the industry the use of KID as support for the information to the investor. The goal of EFAMA is to harmonize a support tool for sale operations, from distribution to order placement.

### IV. Finesti's experience about FPP

Finesti is active with FPP services for 18 months.

We recurrently have the same kind of remarks from the market:

- Legitimacy  
FPP is a wish from the asset managers to support the distribution process while the distributors are not yet convinced of the interest of FPP;

- Responsibility  
Data contained in a FPP could come from different sources, actors and/or delegates; what about the responsibility of all these information?
- Cost  
Managing a FPP, taking care of the responsibility of the information and the multi-source aspects is a significant cost;
- Interest:  
What is the interest to adopt FPP if this is not already a harmonized market standard used by a majority, even if it is restricted to distribution and order levels?

At promoter level, major part of the actors are either pending for the market or staying unconvinced of the efficiency. Anyway, the cost and the responsibility are factors that penalize this initiative.

## **V. Finesti's positioning**

Finesti provides solutions for the European investment fund industry.

Finesti specializes in products and services for the collection, management and dissemination of data and documents on investment funds for a wide range of clients.

FPP has a significant place in the service offering of Finesti and FPP is one of the key issues in our European Fund Hub positioning.

However, if Finesti could accept to assume its positioning and its status of utility in Luxembourg, if Finesti agrees that data providers must play a dynamic role in this process, it remains that, taking care the investment made and/or to be made in FPP services and infrastructures, a business model must be found where data providers will find a recognized place.

This solution could be the critical mass and therefore, a way to grow in the mean time coverage and usage of FPP.

Finally, we think that global data providers like Finesti, based on large hub infrastructures and on local and/or market complementarities, could give very high level of added value to the industry by providing hub services and by concentrating and qualifying information, in particular regarding the actual harmonization initiatives and/or requirements; in that direction, costs efficiency and responsibility of the information could be addressed by these global data providers on the base of coverage, mutualization and complementarities.



## Annex E

### Identifiers and References

#### 1. Bodies to be identified by the Transfer Agent

*The fund:* The standard identification is the ISIN code (ISO Standard 6166). An ISIN should be allocated for each fund at the lowest (share class) level. In certain cases (for example hedge funds) where there is no ISIN, the transfer agent will use an internal ID.

*The owners:* This identification is necessary for multiple reasons: commercial, operational and mainly for fees calculation in relation to a distribution agreement. Several "owner" levels may have to be distinguished and identified separately:

- *CSD, where a CSD is used.* If not all fund shares are issued in the same CSD, the transfer agent must be able to identify, through internal segregation in its books, the different locations.
- *Ultimate investor:* where a fund is sold directly to the ultimate investor, usually this investor has a contract with the fund management company and is identified by the transfer agent.
- *Distributor:* Where a fund is sold through a distributor, the fund management company may not be interested in all cases to know the ultimate investor (too small). The distributor may be any kind of commercial / financial entity or a bank. The distributor has a direct link to the transfer agent and the identification process is similar to the previous case.
- *Order processor / investor custodian:* Ultimate investors or distributors usually use a custodian to process orders and maintain their portfolio. In this case, where the transfer agent needs to know the ultimate investor, it is necessary to identify the additional layers: first the level of the custodian, second the level of the distribution agreement. In certain cases, both the custodian and the next level have (separate) distribution agreements with the fund, this situation will need to be addressed carefully.

#### 2. Counterparty identifiers

##### Generic ID

The experience in certain countries (France for example) demonstrates the feasibility to use BIC codes to identify distributors / institutional investors, rather than proprietary IDs. This facilitates the account opening process and account transfers as well.

##### Proprietary ID

If the BIC is not used, two alternative sets of identifiers exist: The transfer agent account reference, and the distributor or investor custodian account reference. It is best practice to maintain both the internal and the external account reference and use both in individual transaction messaging and in reporting. Either the internal or the external ID could be given the role of the "leading ID". There is currently no agreed industry standard for this. The choice of IDs impacts transfer agents and investor custodians respectively distributors in two areas: customer file maintenance and order processing.

At the order processing level, if the transfer agent chooses to use the external ID, it will have to be keyed into its own system when handling the order. At the customer file level, if a custodian holds for a distributor funds held with different transfer agents and there-

fore subject to different distribution agreements, a large number of different TA references must be maintained in the custodian's customer file and applied as necessary to each individual order.

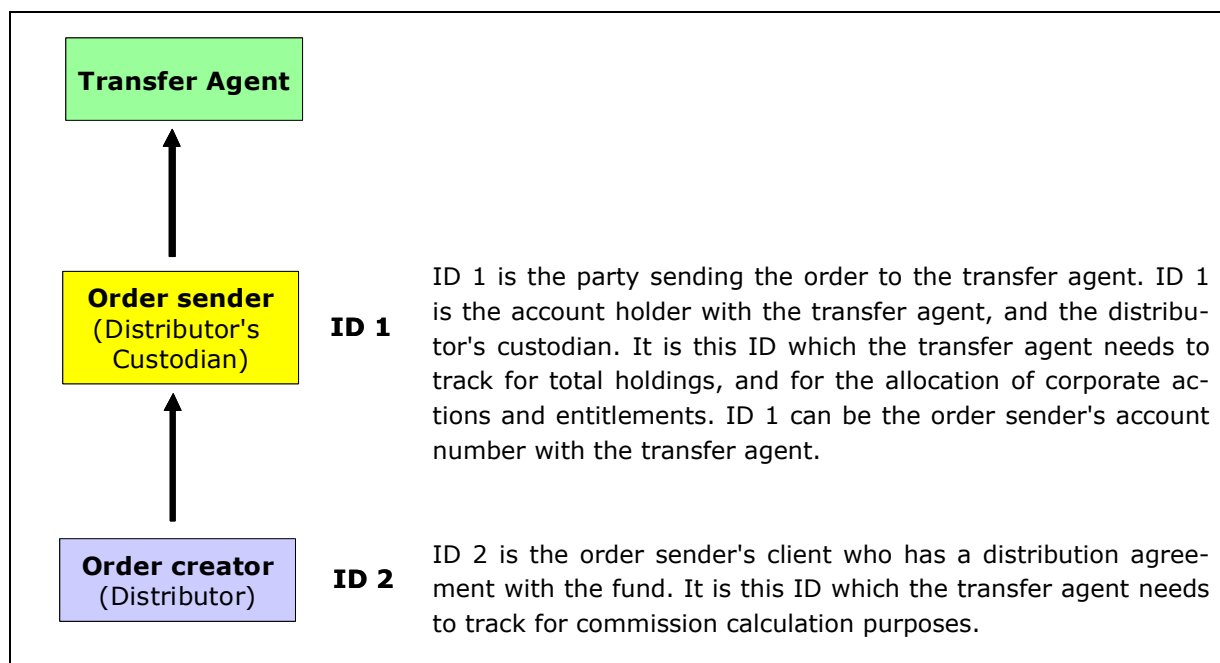
### 3. Order routing, sales agreement and related identifiers

Transfer agents need, as a minimum, the distributor ID and the agreement ID (where there are multiple distribution agreements with one distributor) that governs the transaction. This level of detail is required to identify the contractual party and to ensure that the correct economic terms are applied in the subsequent commission calculation process. Additional information may be required, depending on the complexity of the individual distribution agreement.

Transfer agents routinely work with "references", particularly to identify distributors. Most transfer agents' IT systems use at least two IDs for the same distributor, one being their own internal reference and the second being a reference issued by the distributor.

More generally, each "entity" – be it a fund, a distributor, an investor, or any other party which appears either in the fund register or somewhere along the distribution network, is recorded with an ID proprietary to the transfer agent's inhouse system, and a second ID if necessary.

The party sending the order to the transfer agent may be the distributor, but it may also be an intermediary acting on behalf of the distributor. It follows that the distributor ID issued by the transfer agent or the fund management company (at the time the distribution agreement was concluded) is the "leading" ID which must be carried along the entire intermediary chain. See the scenario below:



The holder of ID 1 must inform the transfer agent that he is sending an order generated by ID 2. In reality, the intermediary chain may be longer i.e. the distributor may be further down the chain. The principle remains the same.

There are set-ups where several intermediaries share a part of the same distribution agreement. In that case, the transfer agent needs to know all parties that participate in

the distribution agreement. The current ISO standard for funds processing already contains three different IDs:

- for the order sender to the transfer agent
- for the distributor
- for the distribution agreement

However, not all markets currently work with all three IDs. In this context, reference was made to the order processing templates drafted by the Findel Group<sup>(1)</sup>. The document describes, for the order placement, order status and order confirmation process, the mandatory and optional business data elements to be specified when implementing the ISO 20022 investment fund messages.

Assuming a fund management company changed its transfer agent, it is likely that the new transfer agent would use its own proprietary ID system. The question was raised whether a recommendation would make sense that a new agent should use the same IDs as the old one (may not be operationally feasible), or alternatively, that all relevant IDs should use a common ISO format. If justified, this issue needs to be pursued by technical experts.

In the Luxembourg-based transfer agency business, the ID of a specific distribution agreement is of limited use. It may simply identify the contract. It is however not sufficient to determine a commission rate or commission amount applicable to a certain transaction, because the parameters specified in a typical distribution agreement tend to be much more complex. To be able to calculate the applicable commissions, the transfer agent or the commission paying agent will normally need a copy of the full distribution agreement concluded between the fund's global distributor (fund management company or promoter) and the local distributor.

The Dematerialised Mutual Fund Sales Agreement initiative ([www.dfmsa.info](http://www.dfmsa.info)) addresses this issue by including the Agreement Identifier and the Local Identifier amongst the key elements in the creation and management of sales agreements. The Agreement Identifier is a unique identifier that the fund management company and the distributor give to the sales agreement. The Local Identifier is an extension of the Agreement Identifier. Local Identifiers can be assigned to certain sections of the sales agreement. The Local Identifier's purpose is to permit the counterparties to the sales agreement to refer easily and precisely to particular commercial terms in their correspondence and in their operational processes. For instance, a Local Identifier could be inserted into an order to serve as "contrast marker", indicating to transfer agents and commission calculating agents precisely which party the order is related to, and what commission that party is eligible to receive under the particular agreement.

#### **4. Additional transaction identifiers**

Besides a sales agreement identifier, each order will also have a unique transaction ID generated by the order placing entity. In addition, the transfer agent will issue its own unique transaction ID in the order acknowledgment. These identifiers are instrumental to an automated transaction reconciliation process for both parties. They must be included in all communication in the same way as described above for the sales agreement ID.

Internal and external transaction references: The party sending the order to the transfer agent will first attach its own transaction reference. The transfer agent confirming the order will quote the sender's reference and will add his own. From then on, all processing steps will contain those two transaction references.

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<sup>(1)</sup> The Findel Group, Luxembourg: "Order Processing Templates. Harmonised templates for the ISO 20022 order, status and confirmation messages". November 2008

## Annex F

### Consolidation of group terms on multiple accounts

Where a distributor is a large group with various entities, all entities participating in a distribution agreement must be captured, otherwise the commission calculations will not be correct. The same is true if a distributor is a "platform", with different sub-distributors underneath it. Transfer agent more and more need to look beyond the first distributor level to get their commission calculations right.

A practical example: If Clearstream had a client (who may or may not be a distributor itself) with sub-distributors having their own distribution agreements, it will try to convince the client to open segregated sub-accounts in Vestima for each sub-distributor. Each sub-account will then be reported separately and correctly to the transfer agent. Assuming BNP as a large Vestima client, there could be the following scenarios:

- Vestima processes in its BNP account orders originated by BNP as a distributor
- Vestima processes in its BNP account orders originated by Bank X which uses BNP as its processing agent
- Vestima holds an account in the name of BNP where it processes order originated by BNP, and a sub-account in the name of BNP/Bank X where it processes orders originated by Bank X

The transfer agent could opt to have one omnibus account for BNP. It then needs to isolate all Bank X orders from the total order volume.

Alternatively the transfer agent could mirror BNP's account structure in Vestima, i.e. replicate the sub-accounts in its own books.

## Annex G

### Orders submitted close to the cut-off time

#### Common principles observed by transfer agents

- As a matter of principle the transfer agent will respect the cut off time and time-stamp the order as they are received. This should be the case for both electronic and paper orders.
- Orders received arrived after the cut off time are deemed to be received on the next business day.
- Orders received through an electronic channel (e.g. SWIFT MT 502) are time stamped automatically at the moment of receipt and the time of receipt is visible to the sender. The time stamp determines if the order will be included for processing under the current trade date, or whether it is considered late and will therefore be stored for processing under the next available trade date. (In France, the trade date is known as the "centralization date").
- Orders received through automated fax are also time stamped automatically upon receipt. Orders received through "manual" fax or any other means, are time stamped manually upon receipt. As above, the time stamp determines the processing cycle into which the order will be included.
- An order submitted prior to cut-off time does not guarantee its execution. See Report section Order Acknowledgement.
- Order routing platforms or hubs will fix their own cut-off times, ideally as close as possible to the fund's.
- The acceptance of an order received after the official cut-off time for inclusion in the "current" processing cycle, always requires a written authorization issued by the fund manager's compliance area or by the fund's board of directors.
- After the cut-off time, the transfer agent will send a pre-advice to the fund manager informing him of all transactions received that day. Transaction values are generally based on the previous day's Net Asset Value. The pre-advice therefore is an estimate and thus a preliminary indication only.
- For funds distributed internationally, there may be several cut-off times, depending on the time zones in which its distributors are located, and depending on the technical infrastructure in place between the local order collector and the transfer agent. Such local cut-off times must be mentioned in the fund prospectus applicable to the distribution of the fund in that respective market.
- In certain circumstances, for operational reasons, some late orders maybe executed on the current trade date. The transfer agents send to the fund the cumulative data (net amount and number of shares subscribed or redeemed) just after the cut off time.
- If a new intermediary layer is added to the chain (a CSD, for example), the Service Level Agreement between transfer agent and distributor must precisely define the impact of this time lag on the final cut off time.

## Annex H

### Cross-border hub solutions

#### Cross-border hub solution implemented by Clearstream/Vestima+

A distributor must inform the TA at the time of establishing the relationship, that its fund shares will be held in custody with Clearstream, and in which account.

If a custodian holds fund shares for distributors with different distribution agreements, segregated subaccounts must be maintained per distributor with Clearstream.

Clearstream stores in its own database the "TA Reference" defined between the distributor and the TA. For each order sent to the TA through the Vestima+ routing tool, the TA reference is added to the order by Clearstream. The TA thus can match each order to the appropriate sales agreement.

Clearstream can send reports detailing the positions and transactions per distributor to the TA on a daily basis or any other frequency. If funds are held in the CFF (Central Facility for Funds) platform, positions can be reported on a trade date or on a settlement date basis.

#### Cross-border hub solution implemented by Euroclear/FundSettle

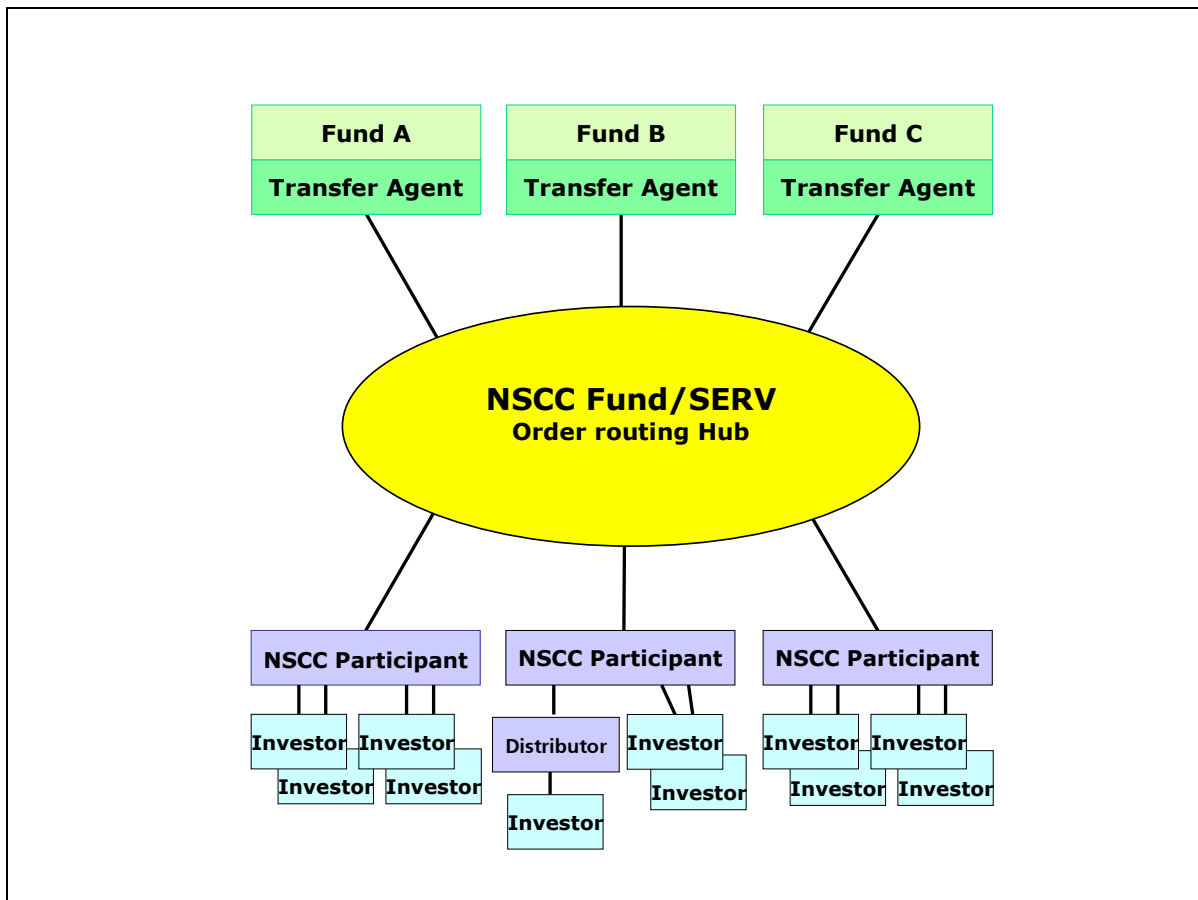
FundSettle will open - on behalf of each of its custodian clients - an account in the books of the transfer agent. If a custodian holds shares for more than one distributor or for a distributor with different distribution agreements, FundSettle will open segregated accounts per distribution agreement with the transfer agent. (cfr. model 2 on page 27, main report)

The account or accounts with the transfer agent will be reflected in FundSettle and linked to the account of custodian. As such FundSettle maintains and manages the different TA accounts on behalf of the custodians. Each order received by FundSettle from a custodian will be linked to the relevant distributor account. In turn, the order is then routed to the transfer agent with a clear identification of the distributor account in the books of the transfer agent.

This will allow the transfer agent to (1) match each order to the appropriate sales agreement and (2) maintain the total holdings per distributor. This means no post factum reporting on positions and transactions between FundSettle and the transfer agent is required to allow the transfer agent to calculate the trailer fees or commissions.

**US market solution implemented by NSCC's Fund/SERV**

NSCC's Fund/SERV facility acts as an order routing hub. The direct participants in NSCC are brokers acting as fund distributors. Sales agreements are concluded between the direct NSCC participants and the transfer agent. There is no need for the transfer agent to identify the parties behind the direct NSCC participant for the purpose of commission or trailer fee calculation. If such underlying parties were fund distributors themselves, they would always be subject to the terms of the sales agreement concluded between "their" NSCC participant and the transfer agent. To support the process of commission and trailer fee payment in a structured and automated fashion, NSCC offers a dedicated tool, Comm/SERV.



**Annex I****Risks between trade date and settlement date****Summary table**

Country	Trade Date	Execution Date (when NAV is received)	Date for creation of shares by the TA (when NAV is received)	Date for creation of shares by CSD (where applicable)	Settlement Date	Date for investor's ownership
<b>France – NAV known</b>	T	T	T	T	T	T
<b>France – NAV unknown</b>	T	T or T+n (*)	T or T+n (*)	T+3	T+3	T or T+3
<b>Luxembourg</b>	T	T	T	N/A	T+3	T+3 (**)
<b>Germany</b>	T or T+n (in case of forward pricing)	T or T+n (in case of forward pricing)	T or T+n	T+n	T+n (usually T+2)	T or T+n
<b>Switzerland</b>	T	T+1	T+1	N/A	T+3	T+1

(\*) when the NAV is received by the TA with  $0 \leq n < 3$

(\*\*) T+3 though the shares would be created and held on the account of the shareholder after pricing on T. However good title for these shares would not be established until settlement is received from the shareholder.

**1. Is it necessary to distinguish between different cases according to the NAV type (known, unknown...)?**

<b>France</b>	Yes, distinction between NAV known and NAV unknown (see table above)
<b>Luxembourg</b>	Not for standard UCTIS III funds
<b>Germany</b>	No
<b>Switzerland</b>	Not necessary. All publicly distributed Swiss funds follow the forward pricing system, meaning that the NAV is not known on the date the order is placed. The order is executed when the NAV is known, this is normally on the business day following placement date.



## 2. What types of financial risks need to be considered due to the existing gaps between these different dates?

In case of bankruptcy of one player, between Trade Date and Settlement Date: are there specific rules in place? Or is it handled case by case through negotiations between the different parties involved?

<b>France</b>	<ul style="list-style-type: none"> <li>- Under normal conditions, no risk due to payment by the investor with Delivery versus Payment.</li> <li>- All non-standard conditions have to be handled on a case by case basis.</li> </ul>
<b>Luxembourg</b>	<p>The basic principles concerning the common Luxembourg fund ranges are as follows:</p> <p>Terms of trading are agreed – institutions will typically be offered credit trading terms whereby they place an order and settle on the settlement date (typically T+3). These terms are set-out in the prospectus. The distributors are generally bound to the terms of the prospectus.</p> <p>Settlement default – if settlement is not received on the due date, the transfer agent, will, after investigation, claim for any lost interest due to late settlement. If a client were not to settle and had no intention of doing so for whatever reason, the transfer agent would sell the shares that were issued and if there was a loss would seek recourse from the shareholder via the courts. If there were a profit it is likely that this would be retained by the fund as the shareholder never had good title to the shares.</p> <p>This is a fairly narrow view from the Fund Company (SICAV or Management Company for FCP's). It does not take into consideration intermediaries who might get caught up in a chain of settlement where they are providing intermediary services. However as stated above, the fund would seek recourse from the named shareholder. Where shares are bought within a pooled account (e.g. Clearstream) on the transfer agent's system, the shareholder would be identified based on the agent who placed the order and the agreement supporting the buying entity. The transfer agent would not seek recourse against a custodian acting on behalf of a shareholder but look to the shareholder, unless settlement was withheld by the custodian for some specific reason. However, this would most likely be a case of late settlement, not default on settlement.</p>
<b>Germany</b>	<ul style="list-style-type: none"> <li>- Under normal conditions, no risk due to payment by the investor with Delivery versus Payment.</li> <li>- All non-standard conditions have to be handled on a case by case basis.</li> </ul>
<b>Switzerland</b>	<p>The fund company could go bankrupt between trade date and settlement date. However, in Switzerland, the assets of each fund are isolated from the fund management company and are owned collectively by the shareholders. Bankruptcy of the fund management company will not affect the assets of any particular investment fund operated by the fund manager.</p> <p>If a transfer agent ("Depotbank") defaulted in the same time period, the investor would not be affected as he has a contractual relationship with the fund management company, not with the transfer agent.</p>

### 3. Are there market practices in place to address / avoid these risks ?

<b>France</b>	Orders are considered as irrevocable when they have been acknowledged by the TA, even if the effective settlement takes place on the settlement date. In case of errors, the order collector is responsible and supports the corresponding profit and loss.
<b>Luxembourg</b>	Orders are considered as irrevocable when they have been acknowledged by the TA, even if the effective settlement takes place on the settlement date. In case of errors, the order collector is responsible and supports the corresponding profit and loss. Broadly speaking the prospectus will set out the terms on which orders are accepted and normally it will be at the discretion of the Management Company as to whether to accept cancelled orders. In practice this normally means that prior to the order cut-off most firms will accept the cancellation of an order. This is commercial sensible when working with clients as the cancellation is mostly to be the result of having detected an error. After the cut-off time depending on the nature of the cause of the request for cancellation, it is likely that Management Companies will agree to cancel the deal if pricing has not been completed and/or the investment manager has not purchased securities based on the notification of orders received. The latter point is particularly relevant when orders are for high value and represent a significant percentage of the fund's portfolio. Beyond this point, cancellations are highly unlikely to be accepted.
<b>Germany</b>	Orders are considered as irrevocable when they have been acknowledged by the Depotbank, even if the effective settlement takes place several days later, i.e. on the agreed settlement date.
<b>Switzerland</b>	See text for Switzerland above.

### 4. What are the rules for the application of corporate actions ?

<b>Luxembourg</b>	Fund corporate actions follow the same form as those for other securities. That is to say that ordinarily for entitlement type actions (dividends, rights issues etc) there is: record data, ex date and a payment date. Depending on the fund promoter, certain options might be offered such as reinvestment of income, receipt of dividends in a particular currency etc. What makes the corporate action world for investment funds difficult is the random nature of events; for example the number of days between ex date and payment date; secondly the communication of corporate actions is not as extensive for investment fund corporate actions as it is for normal equity or bonds. When considering non entitlement driven corporate actions, most of which relate to AGM's and EGM's, these follow the same rules in the majority of instances as are applied to companies who issue equity or debt. Similar to the above, the corporate action coverage is not as extensive. This latter point is noticeable when trading via a CSD or ICSD who for investment funds will notify account holders of the CSD of certain corporate actions but not others. This is an area that is opaque and ambiguous.
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<b>Germany</b>	The rules are similar to those applicable to other securities
<b>Switzerland</b>	Same as for equities. The trade date determines if a position is entitled to a corporate action.

## 5. What are the operational risks due to existing fund processing practices ?

For instance lack of information in the fund prospectus? Use of different references for the same order? Difficulty in the correct application of commissions?

<b>Luxembourg</b>	<p>In most instances the operational risks can be categorised into two sections: Firstly those that are dealt with during the set-up and testing of automated processes (Fund &amp; Distributor etc), it is here that the content of the electronic orders are agreed as per questions 2 and 3 above.</p> <p>The second stage covers the live operations and exchange of orders. This is commonly covered in an operating memorandum between the Funds Transfer Agent (Management Company) and the Distributor. Should there be a hub in the communication link similar documentation is agreed independently between the Transfer Agent and Hub; and the Hub and the Distributor.</p>
<b>Germany</b>	There are no particular operational risks specific to funds processing that would not also occur in the securities market. Trailer fee/commission related information is an additional complexity not found in the securities market. It does not affect the order handling processing process because, in the German market, order processing and the reporting of commission related information are not connected.
<b>Switzerland</b>	There are no particular operational risks specific to funds processing that would not also occur in the securities market. Trailer fee/commission related information is an additional complexity not found in the securities market. It does not affect the order handling processing process because, in the Swiss market, order processing and the reporting of commission related information are not connected.

## Annex J

### Transfer of holdings – Findel Group proposal

#### The Approach

##### The Group

- Autumn 2007 the following group of industry players formed to look at the feasibility of automating the Funds Stock Transfer process.
- Euroclear                                      Clearstream
- Schroders                                        Franklin Templeton
- Attrax    Fidelity International
- Swift    BNP Asset Management
- RBC Dexia                                        Union Bancaire Privee, Geneva
- Credit Suisse, Zurich

##### Steps taken

- Through various sessions the group has mapped the present manual process
- Identified the various problem areas encountered by each player in the transfer chain
- Discussed various options for automation
- Worked in detail on one commonly agreed upon process flow
- Identified the communication flows
- Identified the parties involved
- Identified the detail required in each communication leg
- Identified the scope and players that we are focusing on - ie for financial institutions only
- Identified the Swift XML messages to be used and the field formats
- The proposal has been reviewed by Luxembourg Legal Counsel

#### The Present Process

##### Manual Process

- The present manual process requires written transfer instructions from both transferring parties who hold accounts on the Funds shareholder register
  - Some Transfer Agents require original instructions, some will work from faxed instructions
- Both instructions need to identify the transfer from and transfer to account number at the Transfer Agent, the fund name, number of shares and relevant signatures.
- The receiving financial institutions requires details of the end client
- The TA does not require end client information.

##### Problems with Process

- Often the Transfer Agent will receive one side of the instruction only. The TA then needs to coordinate between both parties in order to receive the second instruction. This causes a delay to the processing time, the transferring banks and ultimately end-clients are unaware of the transfer status and call for details, hence frustration for the client and increased phone volume for the TA. Once the transfer has completed, the receiving bank may well require additional information pertaining to the end client they are to credit, again this usual means another phone call to the TA, rather than to the sending bank who will have this information. The TA will not have this information.
- The Distributors agree that there is no standardised practise within the industry for Stock Transfers.
- To summarize all industry participants agree that transfers are labour intensive, costly and take a long time to be processed. Additionally, transfers are often the first experience of a new client to a distributor and/or intermediary hence the desire of all involved parties to find ways to enhance the process.
- The working group agreed that any solution worked on in order to automate the Stock Transfer process should, where possible, avoid the problem areas encountered today.

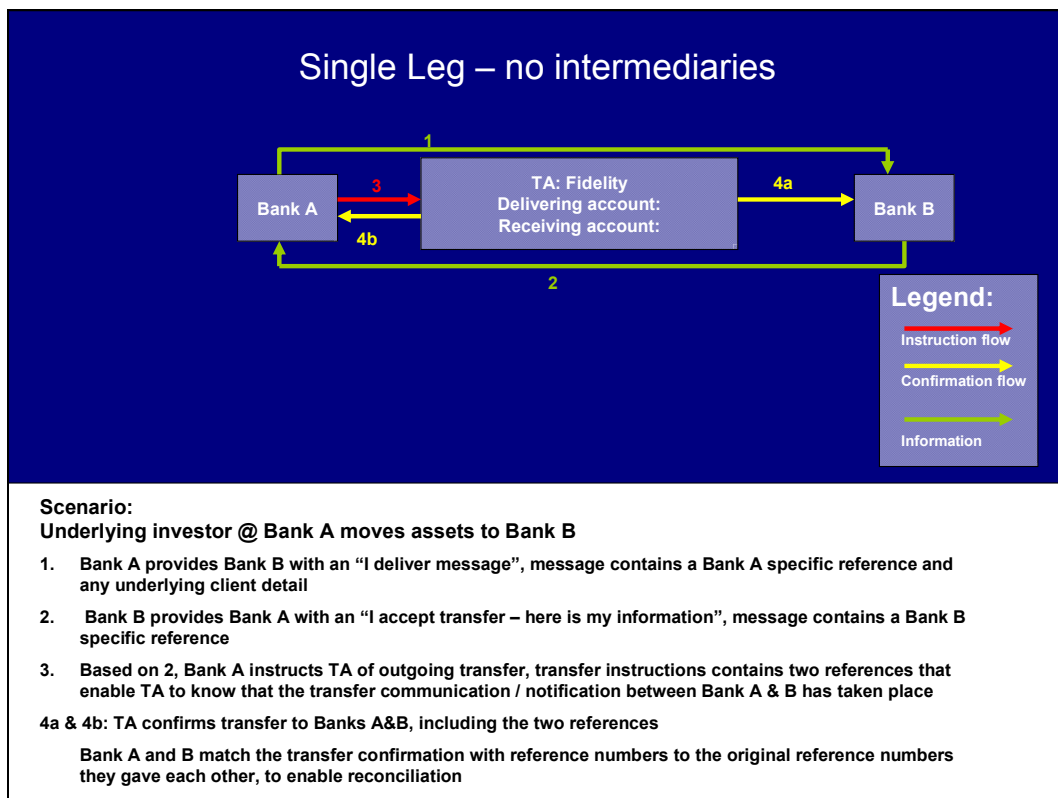
## Potential Solutions

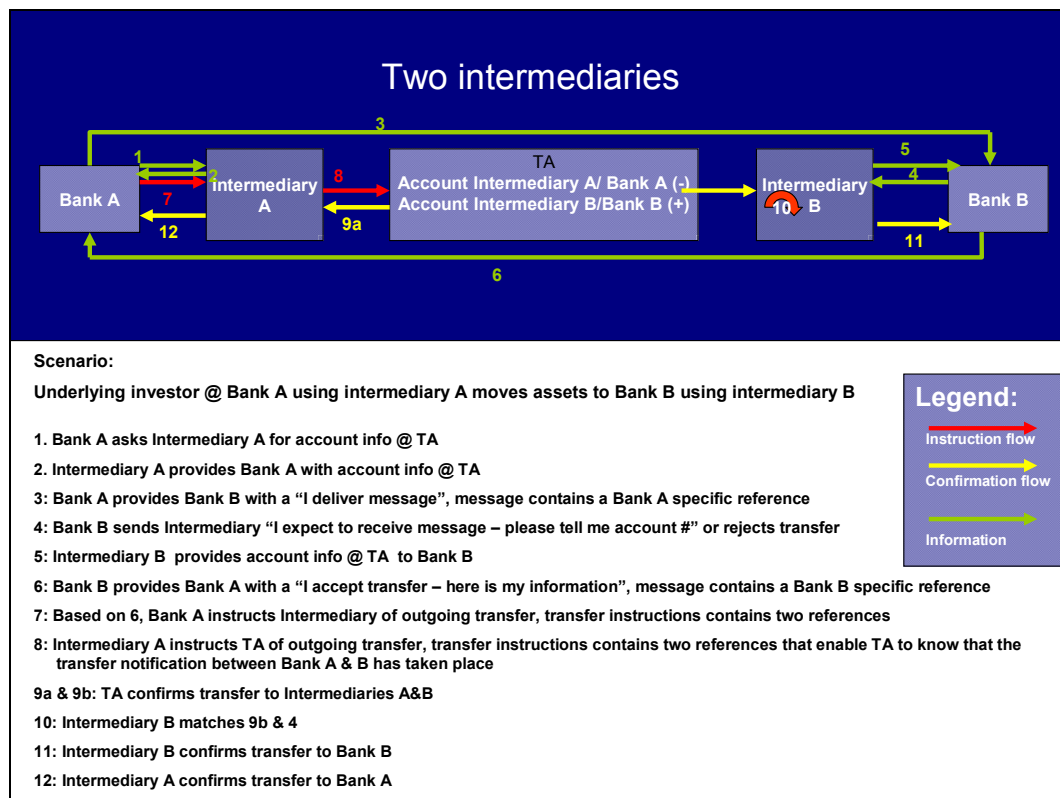
### Retained scenario

- Aware of the afore mentioned difficulties and the wish to explore potential solutions the Working Group considered the following solutions:
  - Matching instructions
  - “Aviso” instructions
  - Timed “Aviso” instructions
  - Single leg instruction
- Considering the pros and cons of each scenario as well as the implementation feasibility, the Working Group agreed to further pursue the Single leg instruction scenario.

### Single leg instruction

- This forces the parties involved to exchange information pertaining to the transfer before a transfer instruction is sent.
- The Transfer-out Bank (Bank A) contacts the receiving Bank (Bank B) to inform them about the transfer, to provide the necessary underlying client details, to provide the TA account details and provide a unique reference number, the Transfer-out Bank (Bank A) also request Bank Bs account details at the TA. Bank B also provides a unique reference number.
- Bank A sends a transfer instruction to the TA, providing both unique reference numbers.
- The TA processes the transfer and sends out deal confirmations, quoting both unique reference numbers.
- Bank A and B will be able to use the unique reference numbers to match the confirmation to the information provided / received previously and then be able to reconcile the contents.





## Conclusion

### Benefits

- The Working Group identified the following main benefits to the single leg instruction scenario:
  - Both parties are fully informed of all transfer details before the transfer is processed
  - No underlying client data is transferred via the TA – hence no data protection issues
  - The Unique Reference Numbers will enable both parties to match the trade conformation to previous instructions and communication, thus enabling reconciliation
  - Faster transfer processing for all industry players as based on one vs. two instructions
  - No need to implement matching logic in TA systems
  - Unwanted transfers will be stopped prior to entering the "real" processing flow
  - Low degree of settlement errors as pre-matching takes place between transferor and transferee
  - Low level of legal issues (claims etc.)
  - Flexible approach as flow can be implemented regardless of connectivity, flows will be optimized with SWIFT connectivity

### Solution

- The group has agreed to progress single leg instruction further.
- Swift has reviewed the message needs and confirmed that they can be covered in XML
  - The Working Group agreed that instructions to TAs should be developed in XML supporting Swift's overall migration effort from FIN to XML messages.
  - Communication between banks could be fax, phone, XML or FIN, as decided upon between the counterparties

## Next Steps

### Next Steps

- Complete best business practises documentation
- Initiate test transfers between some members of the Findel Working Group
- Present the flow to industry working groups e.g. EFAMA etc for validation – in progress – this proposal has already been received / presented to the following:
  - Rob Brown – Ausmaq
  - IOAC meeting in Luxembourg
  - Via Nova group – UK
  - German SMPG
- Request approval from Alfi working group
- Discuss possibility of applying the procedure in manual processing as market practise as present market conditions may not allow for automation projects.

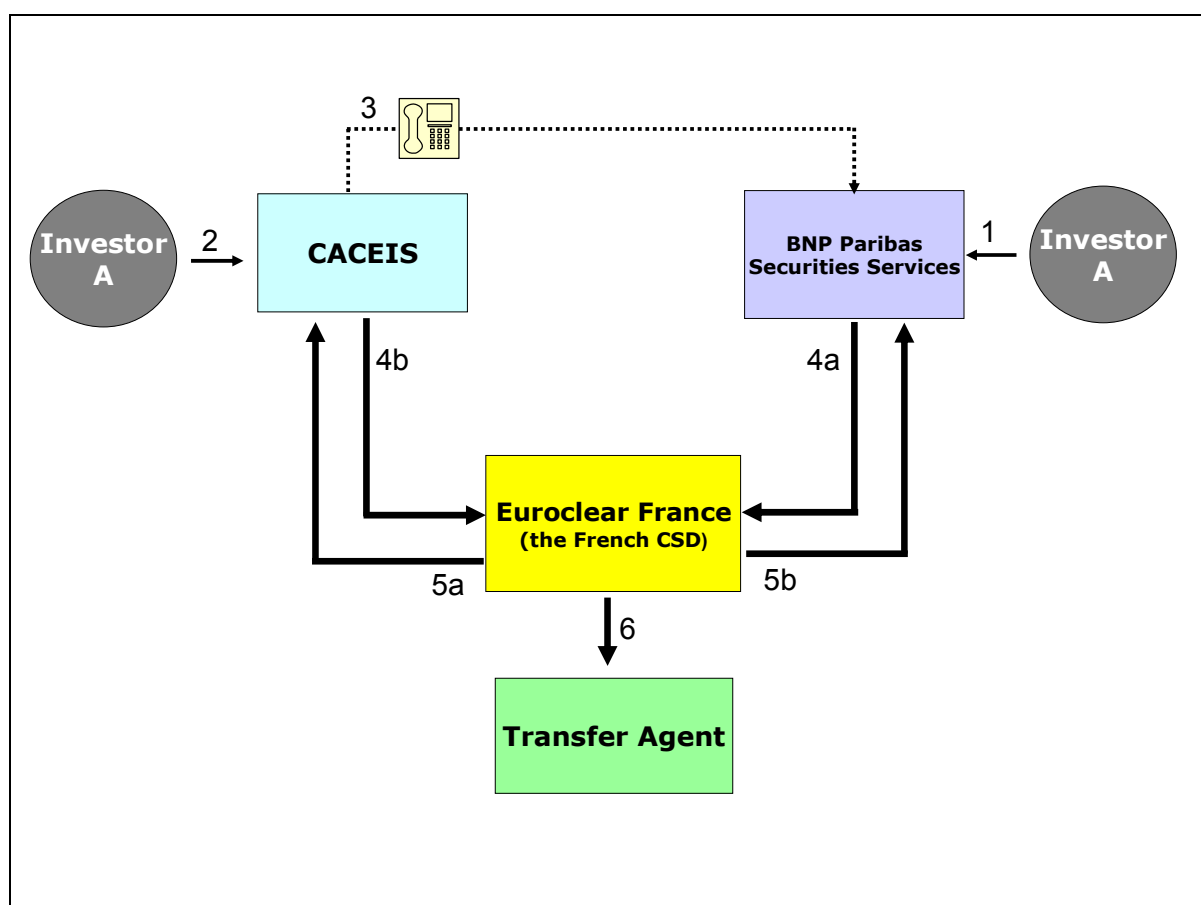
## Annex K

### Transfer of holdings in the CSD model - France

#### Scenario

Investor A moves his custody account relationship from CACEIS to BP2S. His investment portfolio contains 100 shares of a French Fund.

French UCITS fund shares are bearer instruments. They are Euroclear France-eligible (EOC France is the French central securities depository). UCITS fund shares are transferred in exactly the same way like equity shares or bonds.



#### Process Steps

- 1 Investor A opens a custody account with BP2S. He must inform BP2S that his new account will receive 100 shares of French Fund from CACEIS.
- 2 Investor A instructs CACEIS to deliver free of payment 100 shares of French Fund to BP2S, in favor of his new account.
- 3 CACEIS notifies BP2S that an order to deliver shares to BP2S was received, and verifies/updates the receiving account details of BP2S with Euroclear France. If not already in possession of complete information from its receiving client, BP2S uses the



notification from CACEIS to prepare a "Receive free of Payment" instruction to be sent to Euroclear France.

Step 3 occurs outside of an automated process, usually by phone or fax.

4a BP2S sends a "Receive free of Payment" instruction to EOC France (SWIFT MT54x).

4b CACEIS sends a "Deliver free of Payment" instruction to EOC France (SWIFT MT54x).

The two-sided instruction principle is mandatory. If one side only instructs, the instruction is kept pending in EOC France' system as an "accepted but unmatched" instruction for 20 business days. It will then be deleted under advice to the sender.

EOC France verifies certain mandatory fields in both instruction legs to determine if they match. If they do not match, EOC France notifies the two counterparties. It is then up to CACEIS and BP2S to clarify and eliminate between them the cause of the mismatch, and re-send corrected instructions.

5a EOC France withdraws 100 shares of French Fund from its CACEIS account and confirms to CACEIS the delivery to BP2S.

5b EOC France credits 100 shares of French Fund to its BP2S account and confirms to BP2S receipt of 100 shares from CACEIS.

6 EOC France provides periodic position reporting to the transfer agent of the French Fund, detailing the positions kept by each EOC France participant. The reporting frequency is as required by the transfer agent.

## Annex L

### Transfer of holdings in the CSD model - Switzerland

#### Scenario

Investor A moves his custody account relationship from Credit Suisse to UBS. His investment portfolio contains 100 shares of Swiss Fund.

#### Background Information

Swiss fund shares are bearer shares. They are SIS-eligible (SIX SIS is the Swiss central securities depository). Almost all Swiss fund shares are held and settled in SIS. Although dematerialisation is not mandatory, the domestic fund market can be considered as dematerialised.

The Swiss fund market does not use the "order marking" system. Distributor or sales agreement information is not attached to each order, neither for account transfer, nor for subscriptions or redemptions. Order processing is separate from the reporting of information relating to sales agreements.

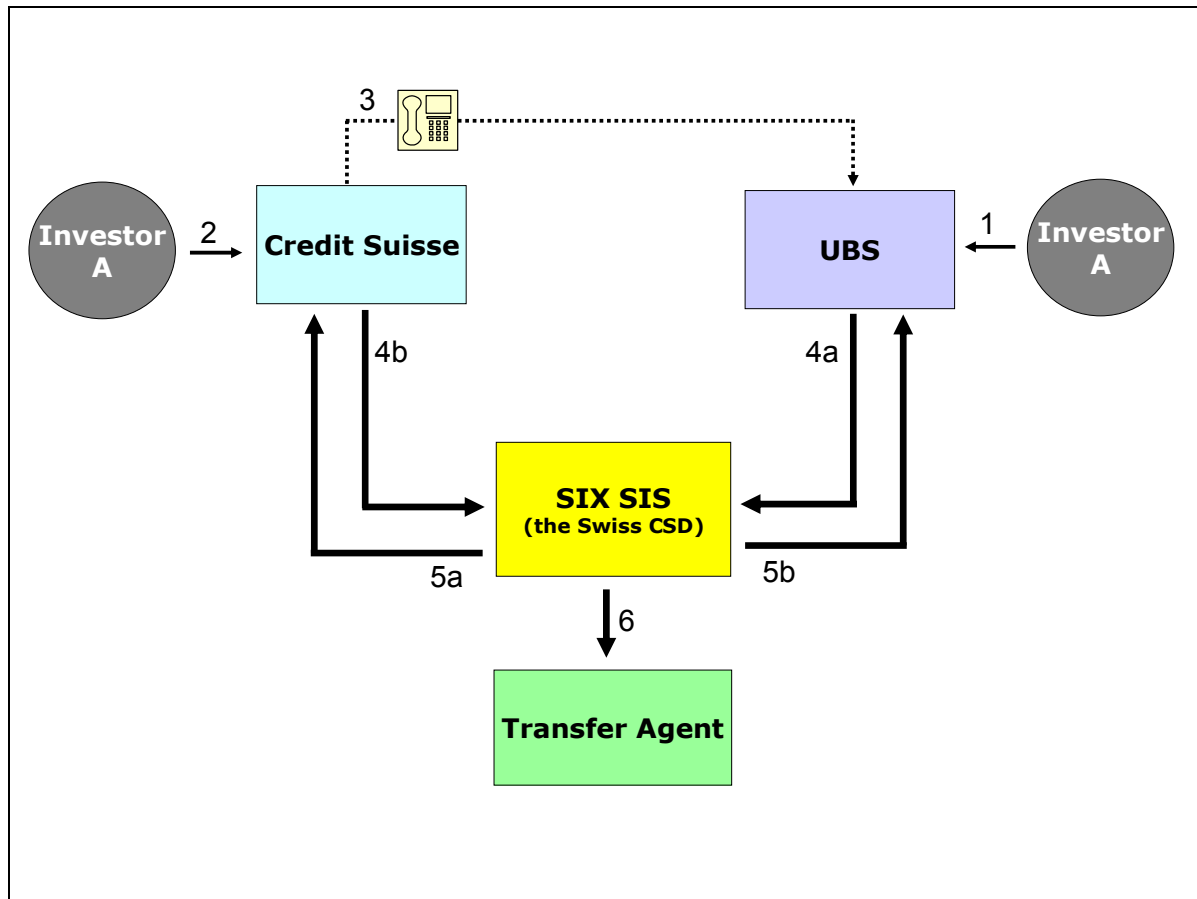
Commission calculation is supported by SIS which provides periodic position reporting to the transfer agent ("Depotbank"), detailing the positions held for each direct SIS participant bank that has a distribution agreement for a fund. The reporting by SIS is done based on a power of attorney which SIS obtains from its participants. The reporting frequency is as required by each transfer agent.

It is possible that an SIS participant bank, which is a fund distributor, acquires an institutional custody client who is itself a distributor with its own distribution agreement. This is a situation which most SIS participants seek to avoid. They will try to convince their client banks to give up their separate distribution agreements and instead benefit from the agreement of the direct SIS participant which in most cases is more favourable. Where this is not possible, the direct SIS participant will open a segregated account in SIS for its client bank, and SIS will then report the positions of that account separately to the transfer agent. These cases are exceptions.

#### Account transfer process

Swiss fund shares are transferred in exactly the same way like equity bearer shares or bonds.

See process description on next page.



### Process Steps

1. Investor A opens a custody account with UBS. He should inform UBS that his new account will receive 100 shares of Swiss Fund from Credit Suisse.
2. Investor A instructs Credit Suisse to deliver free of payment 100 shares of Swiss Fund to UBS, in favor of his new account.
3. Credit Suisse notifies UBS that an order to deliver shares to UBS was received, and verifies/updates the receiving account details of UBS with SIS (only if necessary – in practice, the larger banks have each others' account details with SIS in "standing instruction" databases and this step is not always done). If not already in possession of complete information from its receiving client, UBS uses the notification from Credit Suisse to prepare a "Receive free of Payment" instruction to be sent to SIS. Step 3 occurs outside of an automated process, usually by phone or fax.
- 4a UBS sends a "Receive free of Payment" instruction to SIS (SWIFT MT540).
- 4b Credit Suisse sends a "Deliver free of Payment" instruction to SIS (SWIFT MT542).

The two-sided instruction principle is mandatory. If one side only instructs, the instruction is kept pending in SIS' system as an "accepted but unmatched" instruction for 20 business days. It will then be deleted under advice to the sender.

SIS verifies certain mandatory fields in both instruction legs to determine if they match. If they do not match, SIS notifies the two counterparties. It is then up to Credit Suisse

and UBS to clarify and eliminate between them the cause of the mismatch, and re-send corrected instructions.

- 5a SIS withdraws 100 shares of Swiss Fund from its Credit Suisse account and confirms to Credit Suisse the delivery to UBS.
- 5b SIS credits 100 shares of Swiss Fund to its UBS account and confirms to UBS receipt of 100 shares from Credit Suisse.
6. Periodic report by SIS to the transfer agent, breaking up its total position by the positions held by each SIS participant as of a given date.

## Annex M

### Transfer of holdings in the CSD model - Germany

In the German market, mutual fund shares are usually bearer shares and issued in Clearstream Banking Frankfurt (CBF). They are freely transferable within CBF.

#### Current Process

Currently, the FOP-instruction in CBF is a "single leg instruction" for all instruments. The investor tells his old custodian (Bank A) that he left for a new custodian (Bank B). In addition he tells Bank A the settlement instructions of Bank B including his new account number at Bank B.

Bank A delivers the units to Bank B's CBF account including various required information / references. As Bank B may not be a participant of CBF, the instruction could be quite complex, such as "CBF account 7001 f/o ABCDDEXXX f/o acc. 3658827366 f/o John Doe". As a result, Bank B receives the units in its CBF account with these references and Bank B now needs to apply the units to the correct account, mostly in a manual or semi-manual process.

The current process entails various problems and risks: Quite often the references supplied by Bank A do not contain all necessary information, there might be misspellings or the account number might not be correct. In all cases Bank B has to manually investigate and if the given details by Bank A do not fully match the client records within Bank B, Bank B is not allowed to credit the shares to its client account. This then leads to various phone calls to clarify the situation, or the shares will just be sent back to Bank A.

The inherent risk is that, where positions are moved into a wrong CBF account, Bank A might have problems to get the units back because obtaining the necessary authorization is out of control of Bank A.

#### Future Process

Because of the above mentioned problems CBF will introduce – in November 2009 - the "double leg instruction" requirement for all FOP transfers. The receiving Bank B might then opt for either an auto-matching performed by CBF (for retail business) or for an active matching. All institutional custodians will be opting for the active matching because this will enable the custodians to have a full STP process. The above mentioned manual or semi-manual processes will therefore no longer be needed.

The overall process works the same way as described in the Swiss model.

The trailer fee process works exactly as described in the Swiss model.

## Annex N

### Local hub solution - case study France

Key market features:

- Euroclear France has a total of approximately 250 account holders (= financial institutions, usually acting as intermediaries for end-investors). 85 account holders are holding funds with Euroclear France.
- Euroclear France handles approximately 15'500 funds representing an outstanding of approximately EUR 1000 billion, issued by around 500 fund companies and serviced by 39 centralisateurs (transfer agents). This means that more than 80% of all French fund shares are held with Euroclear France as the ultimate custodian. Euroclear France processes approximately 150'000 third party fund distribution transactions per month.
- Fund settlement and custody processes are basically the same as for equities and bonds. A new function was added to handle the specifics of the funds' primary market environment: automatic accounting of the creation of new shares in a quasi-issuance account managed by the fund agent. Settlement is in a true DVP mode in central bank money for all EUR-denominated transactions.
- The addition of an ISO standards-based electronic order routing platform to replace order transmission by fax and phone created an end-to-end STP environment. Some features specific to the French fund market made it necessary to design SWIFT message formats that differ from the official ISO standards.
- For order tracking (commissions / trailer fee allocation), the French market has defined two solutions: BIC codes as recommended by EFAMA, or bilateral references created by asset managers. Since asset managers may conclude more than one fee agreement per fund with the same distributor, an extension of the BIC code was necessary in many cases to properly link a transaction to the applicable fee agreement. In the absence of these bilateral references, process automation would not be possible. Order marking or "marquage des orders" is a pre-requisite to the automation of the order routing. In practice, 95% of orders processed through the French order routing platform are marked (50% with the standard BIC code, 50% with a bilateral reference). More than 1000 distributors have been identified by the French centralisateurs. The validation of the associated 1000 BIC codes for order marking – or the need for bilateral reference codes – by agents consumed around one year's time. The bilateral reference codes are created by the asset managers.
- Cross-border interoperability: Non-French distributors/custodians (and their underlying investors) not having direct access to Euroclear France can gain indirect access through a Euroclear France account holder, including Euroclear Bank/FundSettle and Clearstream/Vestima+. The interoperability between the French hub and the pan-European infrastructures facilitates cross-border distribution of French funds. In addition to these existing cross-border links, Euroclear is consolidating the ESES markets through a single infrastructure (implemented for France, Belgium and the Netherlands on January 19, 2009). This will further reduce the operational costs for funds distribution among these countries. Further market consolidation is expected soon (UK, Nordic countries).

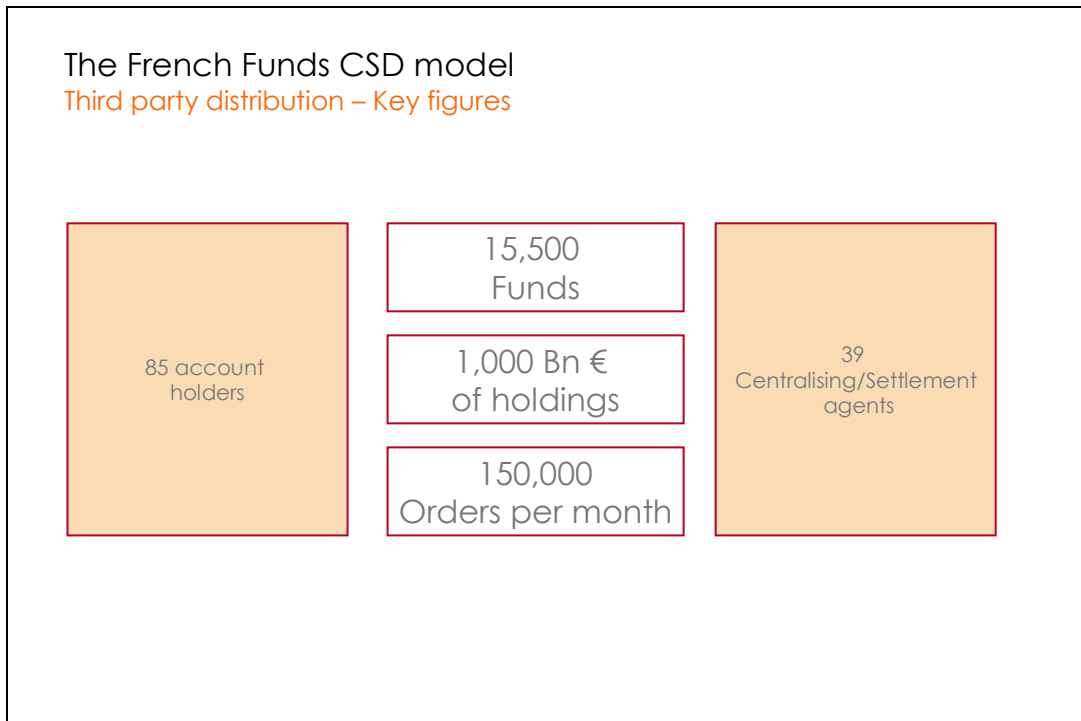
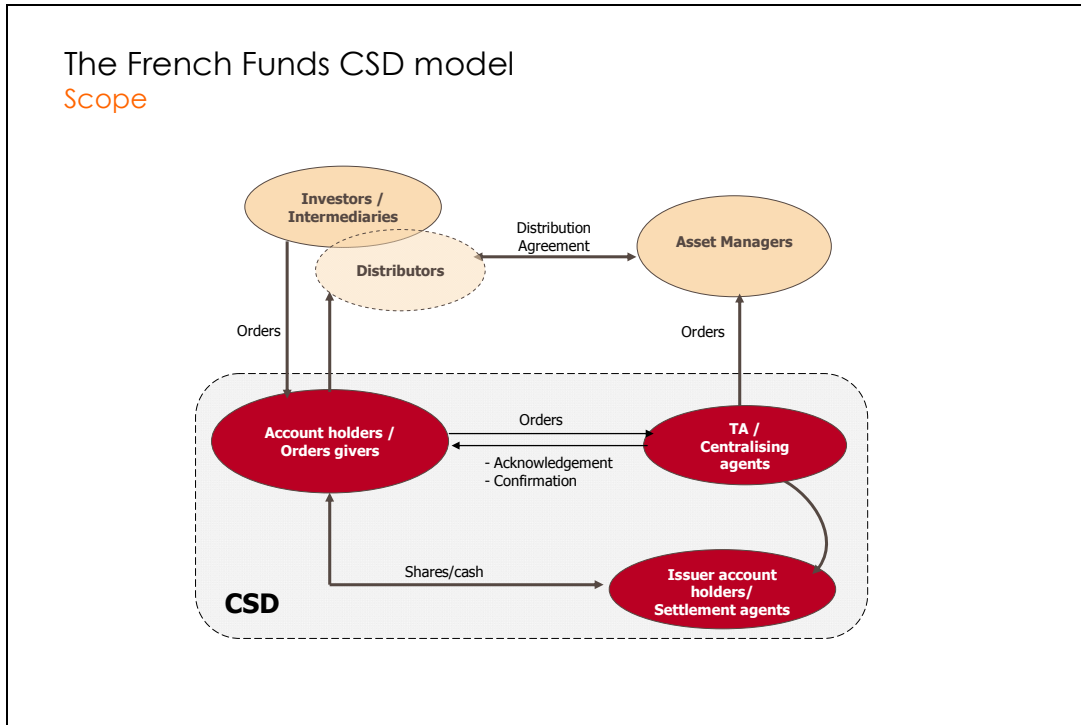
Open issues or challenges mentioned:

- **Order tracking:** if a fund position is moved from one custodian (distributor) to another after the initial trade - for instance when an investor changes his banking

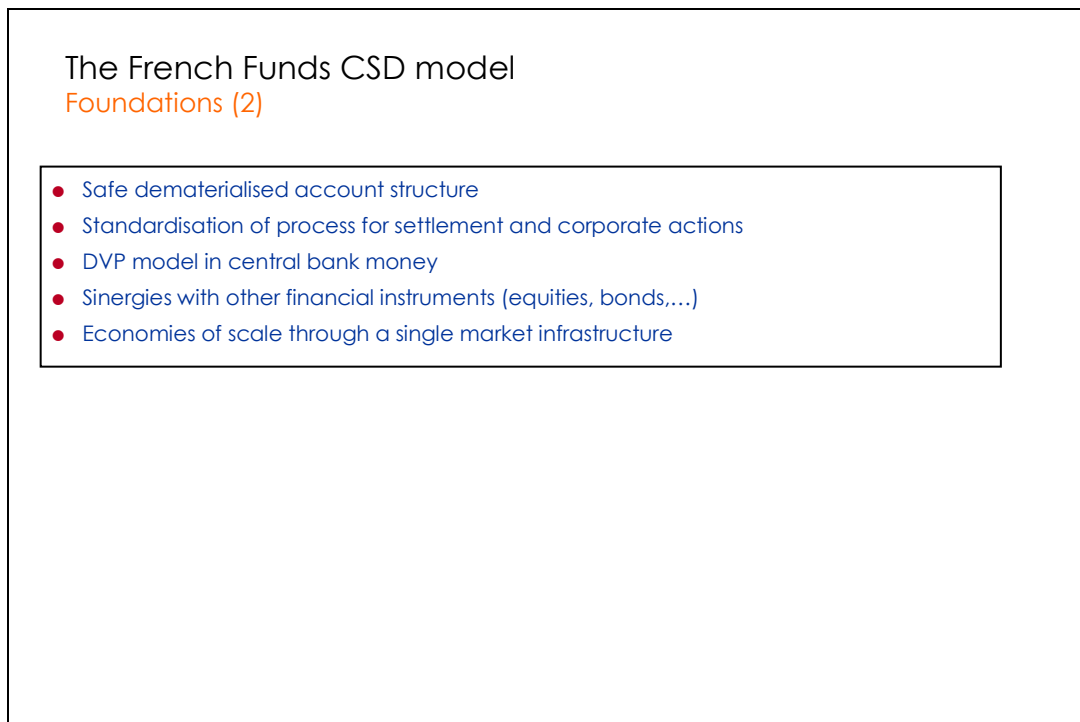
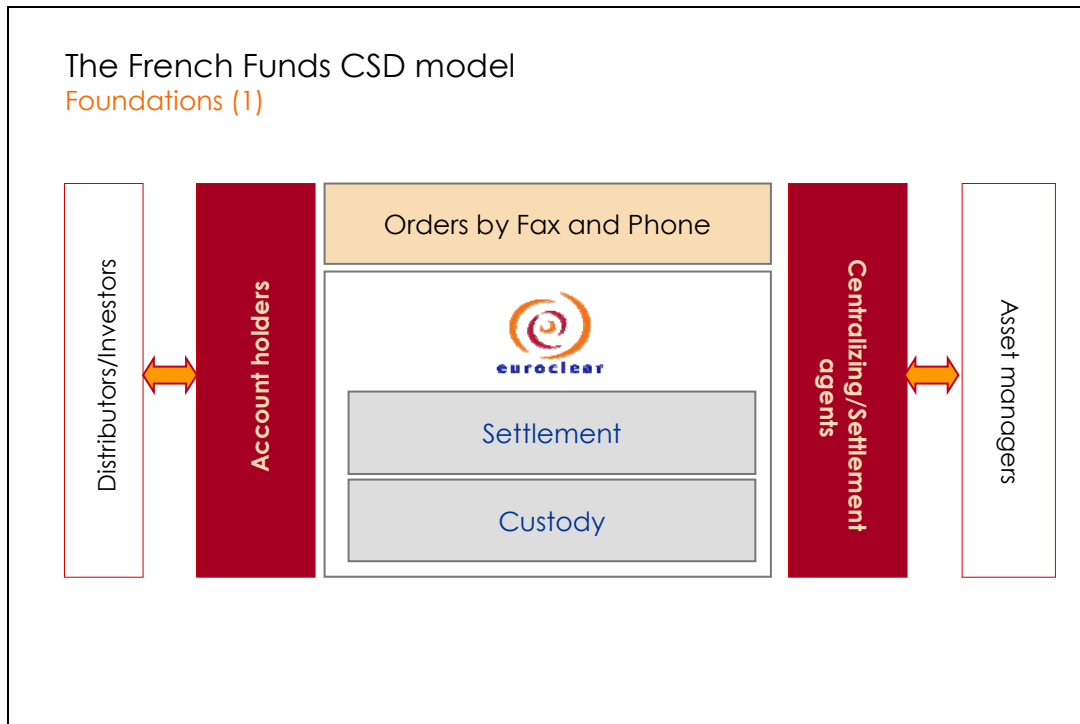
relationship - the centralisateur needs to be informed. The French "TA light model" may provide a solution.

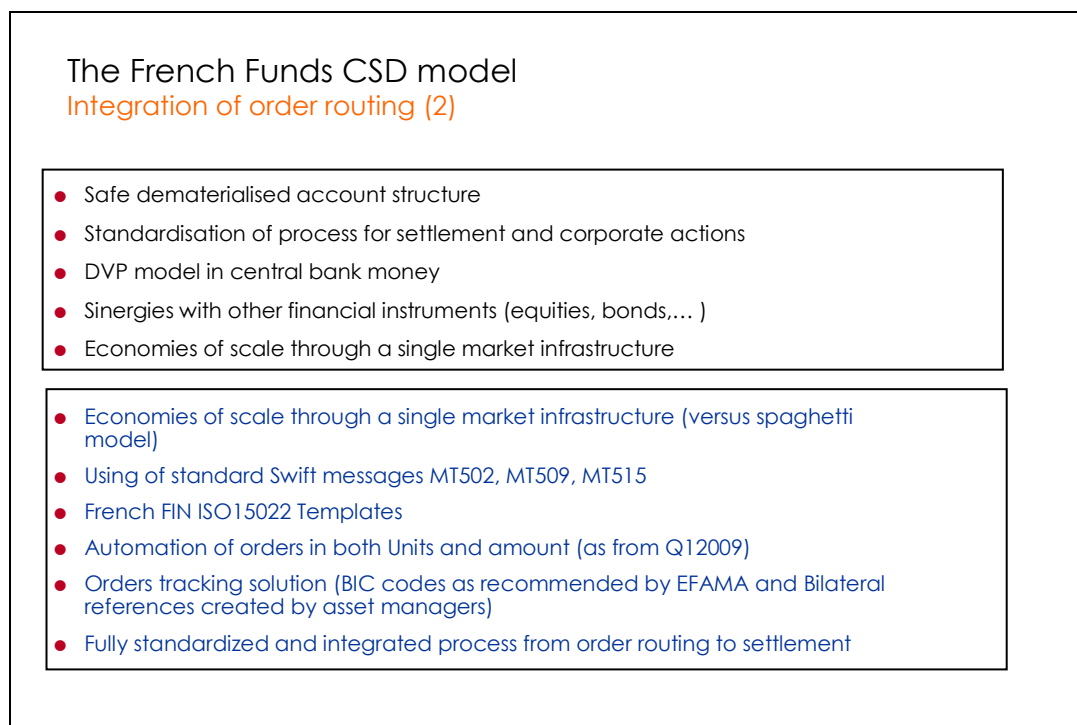
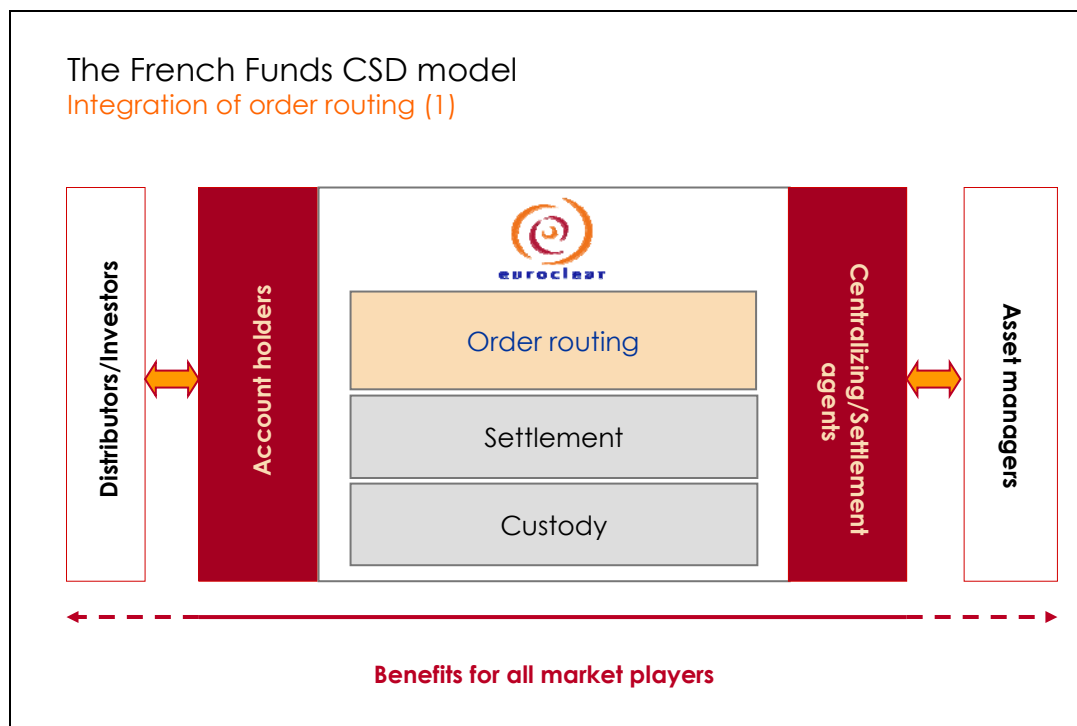
- **Direct orders:** Financial institutions not qualifying for direct participation in Euroclear France, such as fund of funds, insurance companies etc, increasingly request direct access to agents. This point needs to be addressed in the order processing work stream.
- **Order aggregation:** custodians increasingly send very large aggregated orders to centralisateurs close to cut-off time, which creates potential operational risk. From a risk management perspective, non-aggregated orders would be preferable. This point needs to be addressed in the order processing work stream.
- **XML messages:** The French market aims at migrating from ISO15022 to XML for order routing. Planning is under discussion with market players in France and SWIFT.

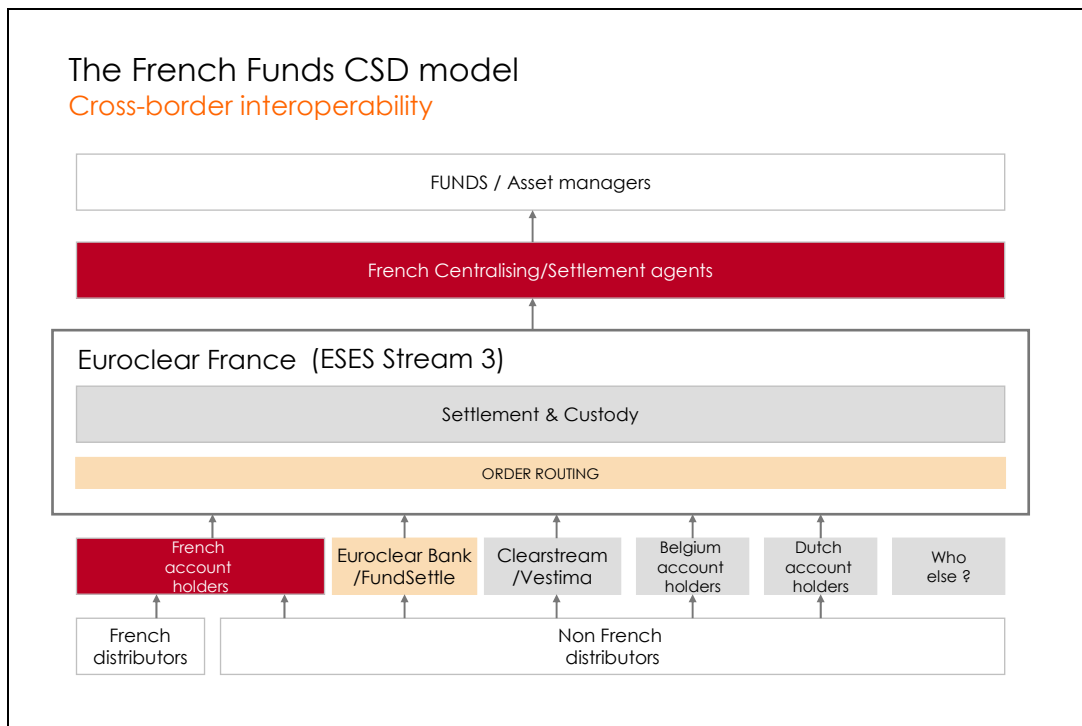
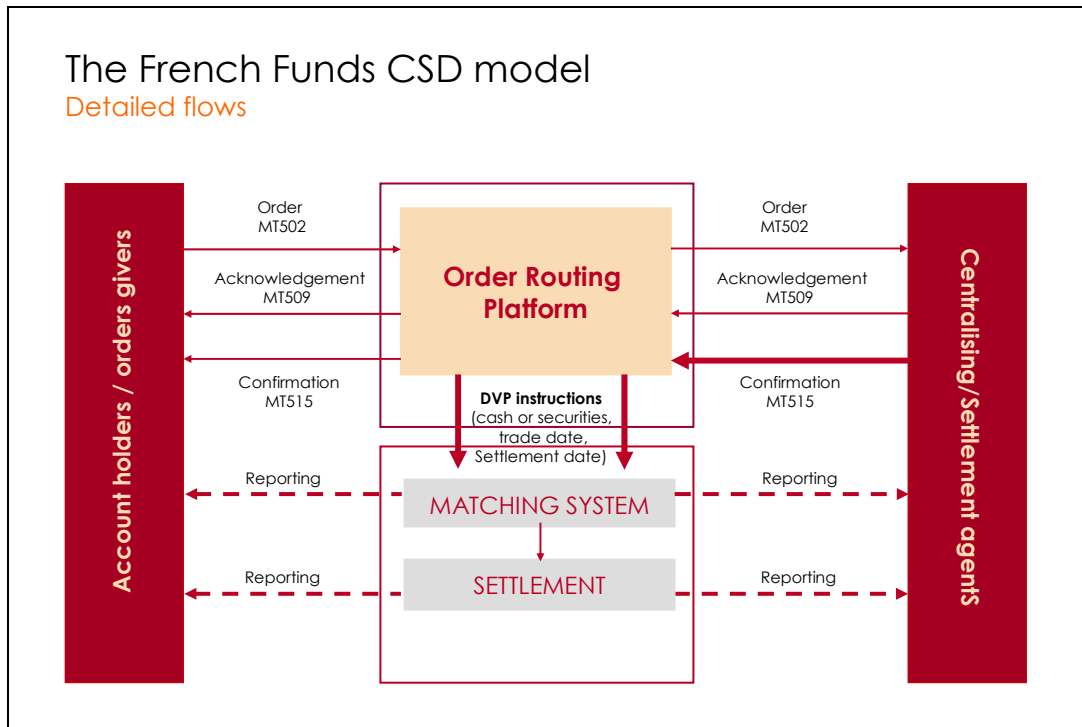












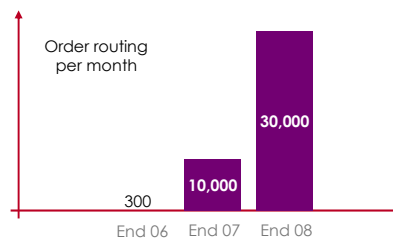
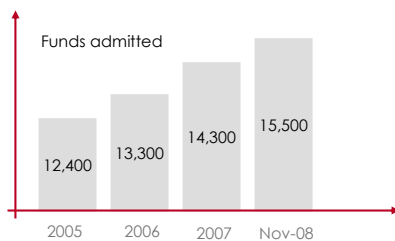
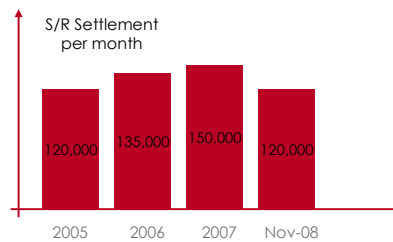
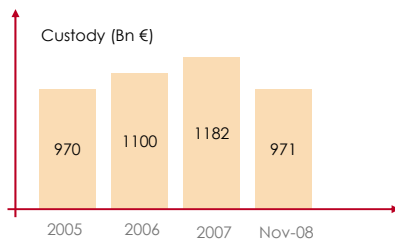
## The French Funds CSD model

A perfectible model

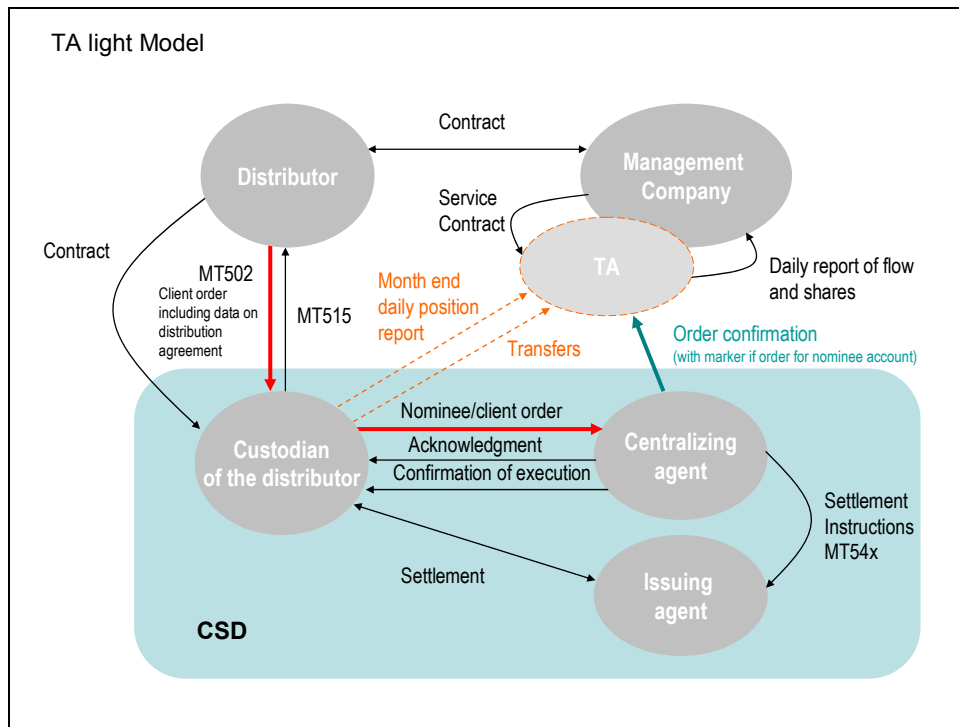
Benefits of the CSD model	Expected improvements	Answers/Actions
Economies of Scale through a single market infrastructure	Markets consolidation	(1) ESES (white paper -> value proposition with 3 markets) (2) Euroclear Single Platform
Safe dematerialised account structure through the CSD		
Automation/Standardisation of process for order routing, settlement and asset servicing	Strengthening harmonisation	New French code of conduct implemented since october 2008
Standard ISO15022 messages	XML messages	Planning to confirm
DVP Model in central bank money (€)	DVP for non € transactions	Euroclear Single platform
Funds holding with other financial products		
Orders tracking solutions	Tracking of transfers (post-trades)	French TA light model
Domestic model opened to cross-border distribution		
	Direct orders	Ongoing works with regulators

## The French Funds CSD model

Key figures – Third party distribution



TA Light Model, illustration provided by BNP Paribas Securities Services



## Annex O

### Local hub solution - case study Germany

Key market features:

- More than 70% of all investors place fund subscription orders with their bank
- The Depotbank is by law issuing the shares (i.e. this is not a choice done by the fund management company)
- By law, all German fund units are bearer instruments.
- A fund in Germany is a "separate group of assets" (not a separate legal entity) managed by the KAG (Kapitalanlage-Gesellschaft = the fund management company) in a fiduciary capacity for the investors. Checks and balances exist between KAG and Depotbank. Historically KAG and Depotbank were typically entities within the same financial services group but this has changed.
- All German retail funds are CSD-eligible. Most issuers issue their fund shares into the CSD although doing so is not mandatory. It is possible to issue a portion of all outstanding shares in the CSD, and another portion in a third location.
- The market is not fully dematerialized. Investors can ask to receive physical certificates but, in reality, most fund shares are immobilized in the CSD and share movements are by book-entry.
- Many funds distributed in Germany are domiciled abroad, mainly in Luxembourg. Foreign funds can be held in the German CSD, usually in the form of "variable global certificates". Foreign funds must appoint a local paying agent which provides access to the local CSD and to the Bundesbank cash settlement system.

Model 2 (refer to the slides) is the most frequently used scenario in the German domestic market. The investor places an order with his/her bank which acts as the fund distributor. The order is forwarded to the Depotbank for execution. Settlement takes place between the Depotbank's account and the distributor's account with Clearstream Frankfurt. The cash leg of the transaction is processed (DVP) using the Bundesbank payment system. The standard settlement period is T+2, same as in the German domestic equity market.

Note: The **Swiss** and the **Austrian** fund market set up corresponds to the German Model 2, with the exception that the standard settlement period is T+3.

Model 3: INVESTRO is the domestic fund order routing and execution hub using the same infrastructure and mechanics as the order routing system XONTRO for equity trades which most German banks use. Fund trades routed via INVESTRO are executed automatically using the price taken from WM Data Services (which in turn collects and disseminates from the fund companies the subscription and redemption prices). INVESTRO issues confirmation notes of all executed trades to the Depotbank and to the distributor. At the same time, INVESTRO sends settlement instructions to Clearstream Frankfurt where the trade will settle automatically, without the need for any instructions issued by the Depotbank or the distributor.

In mid-2005, some 40% of the total order volume was routed through INVESTRO (Source: German SMPG); the figure is likely to be higher today.

Model 4: Domestic orders can also be routed through Vestima+ to the Depotbank for execution and subsequent settlement in Clearstream Frankfurt. Vestima+ is able to send settlement instructions directly to Clearstream Frankfurt on behalf of the Depotbank and the distributor. However this is done automatically only if the two counterparties choose

this set-up. Each party can decide on its own, in independence of the choice of the other parties, i.e. Vestima may generate on behalf of the distributor while the Depotbank instructs by itself. Alternatively, the Depotbank and the distributor send their own settlement instructions (DVP / RVP) to Clearstream Frankfurt.

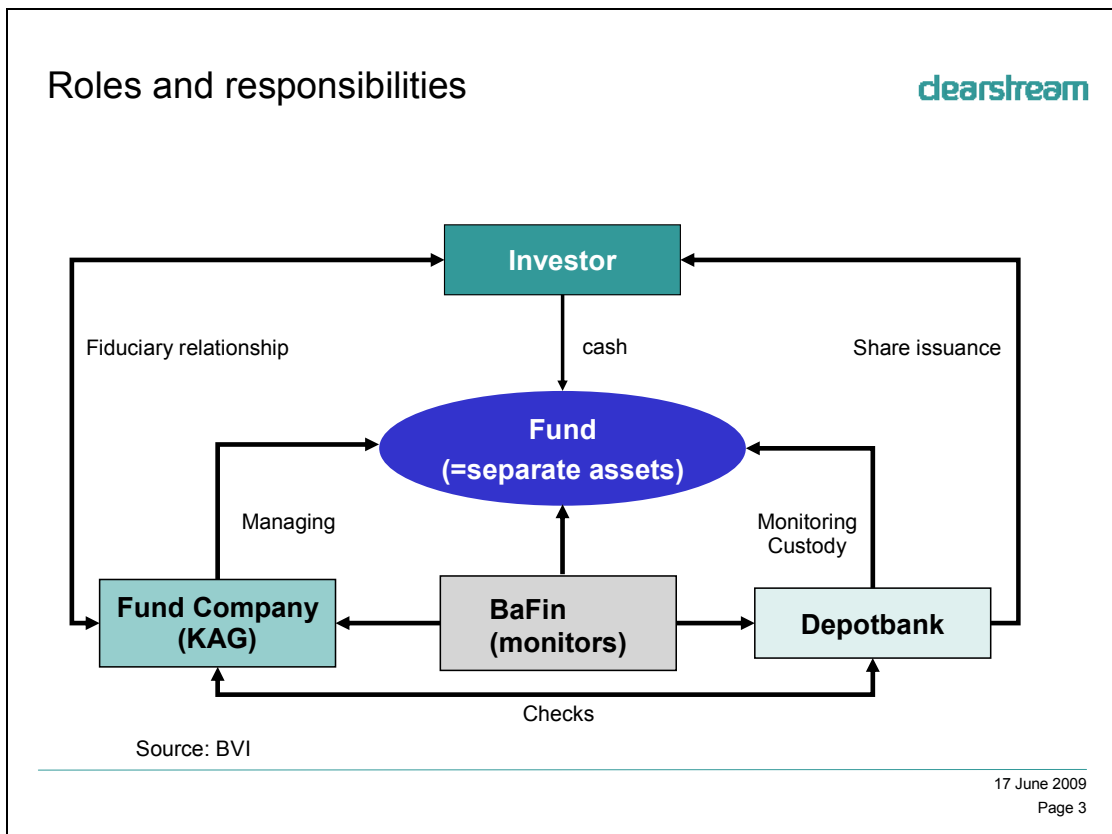
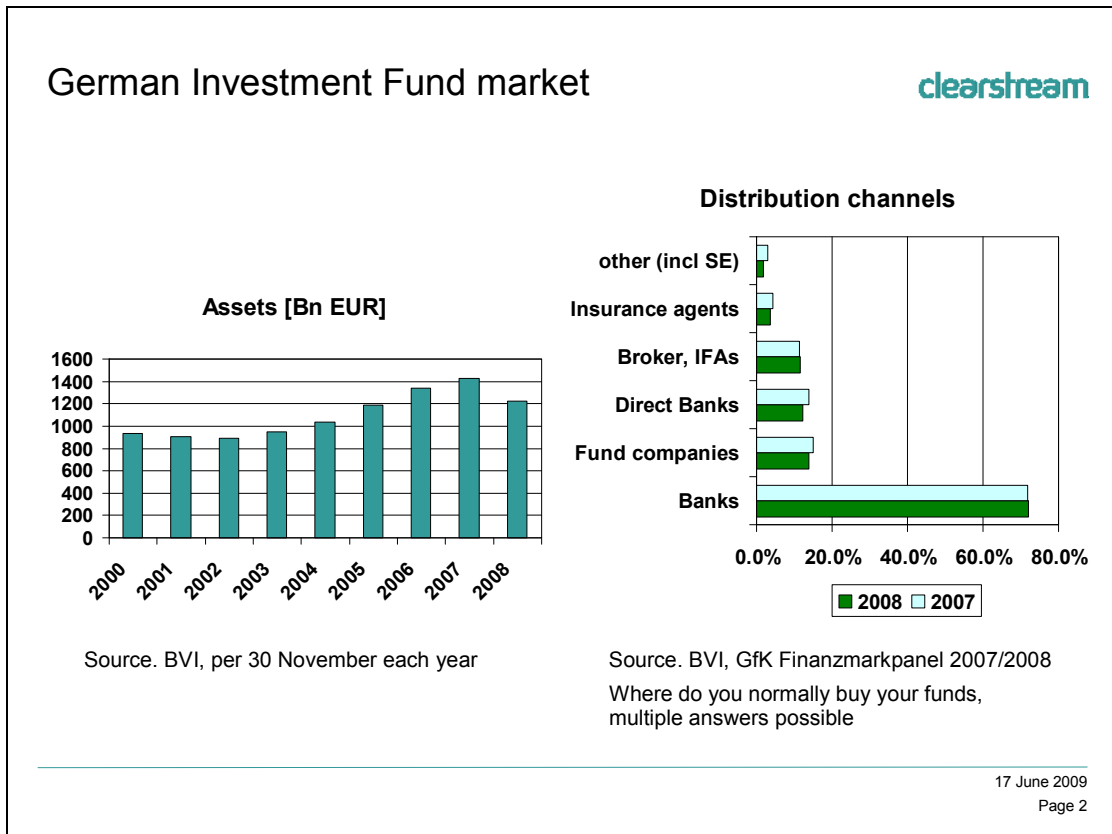
Vestima+ also provides non-German market participants with order routing facilities to German or foreign funds.

Since November 2008, an interface between INVESTRO and Vestima+ with a format converter provides connectivity. Through the interface, domestic INVESTRO users gain access to the full range of international funds supported by Vestima+; and Vestima+ users can access the domestic execution platform INVESTRO.

Notable differences between the German and French market with regard to order processing:

- In Germany (and Switzerland and Austria), distributor and/or sales agreement references are not attached to each order but communicated to the Depotbank/Transfer Agent separately by periodic reporting.
- The price for the customer side execution is taken from the centralised publication through WM, not from the order confirmation
- If INVESTRO is used as the execution platform, the execution confirmation is issued by INVESTRO, not by the Depotbank/Transfer Agent.







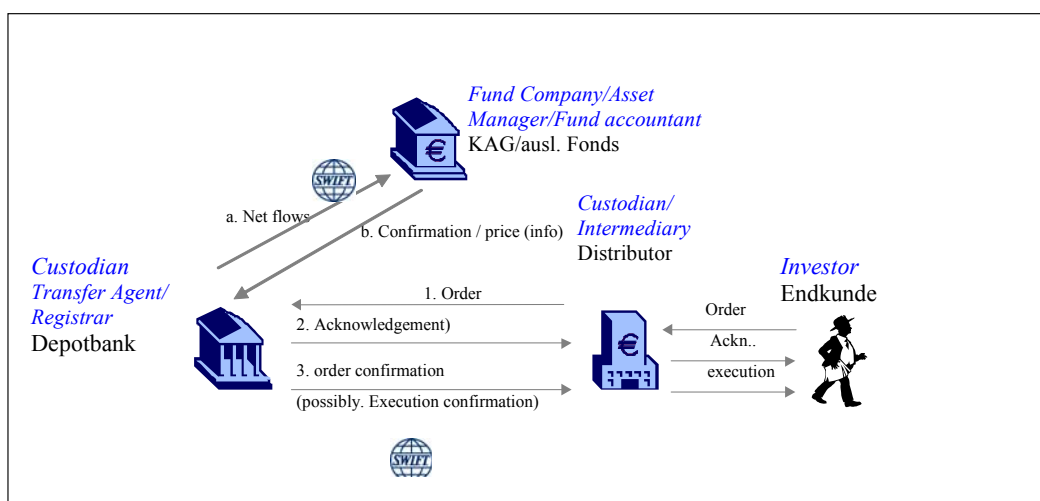
## Points to note



- Fund shares
  - Fund shares (“Anteilscheine”) are bearer instruments
  - Physical shares are possible although not much in use anymore
- Issuance and holding
  - No obligation to issue through the CSD
  - A fund issued through the CSD does not need to be 100% in the CSD
  - The CSD – Clearstream immobilises fund shares by “variable global certificates” issued by the fund or by safe-keeping the physical certificates
- Non German funds
  - A large portion of the funds distributed in Germany are domiciled in other countries (mainly Luxembourg) due to tax and regulatory considerations
  - Non German funds can be included in the CSD also by issuing “variable global certificates”.
  - A “paying agent” that holds a CSD account and provides access to Central bank money settlement with the Bundesbank needs to be appointed.
- Price publication and usage
  - NAVs are published through WM–Daten the central German data provider
  - Funds publish two prices NAV (“redemption price”) and Issuance price (“Ausgabepreis”) Issuance price = NAV plus subscription commission / front load
  - Typically the published price is used for settlement (not a price confirmed in the order)
  - The retail investor pays a price between NAV and “issuance price” – expressed as rebate on Subscription commission

17 June 2009  
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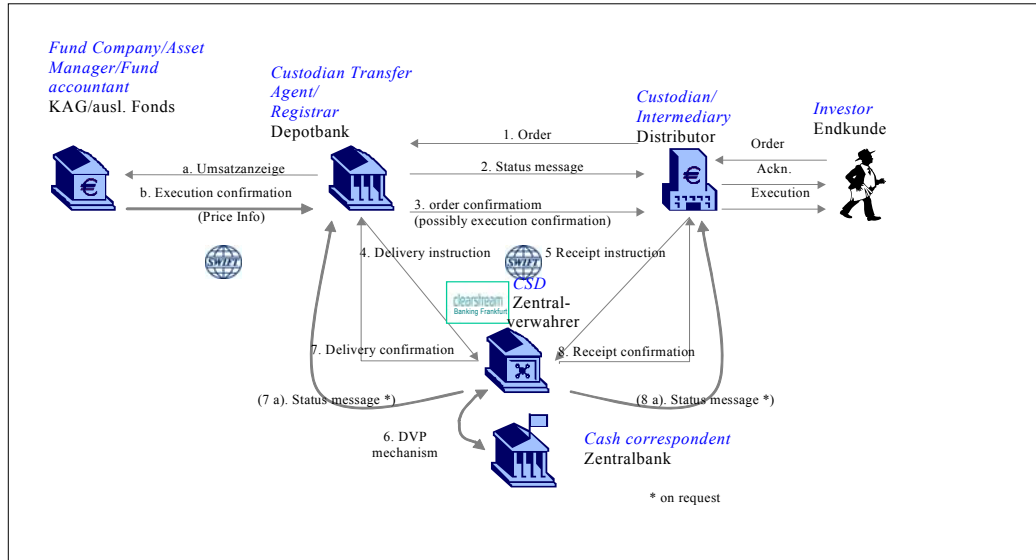
## Model 1 Direct ordering at the Depotbank



Source:  
DESSUG/BVI: Anteilscheingeschäft/Depotgeschäft 03.01.2005

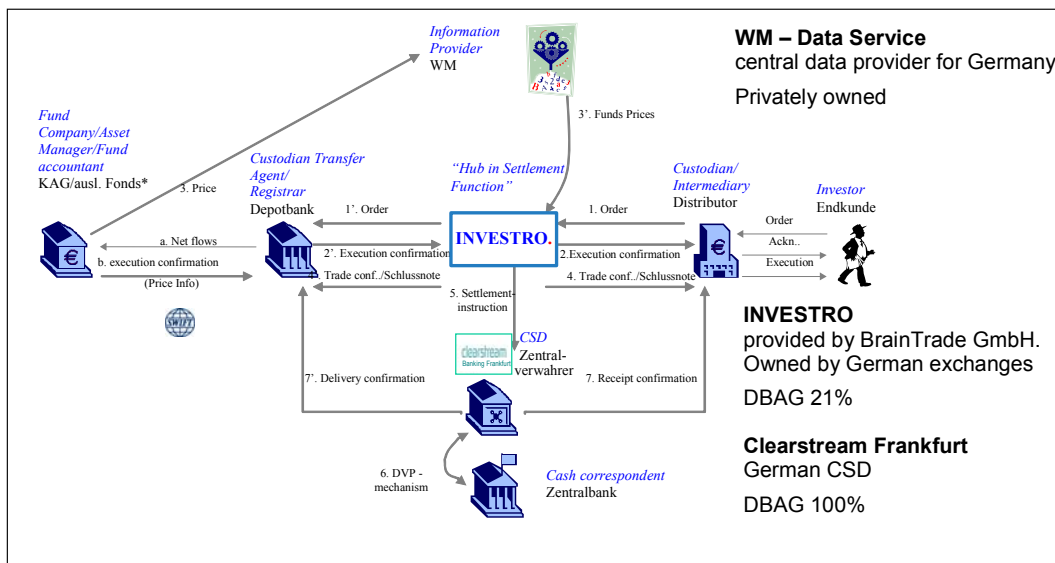
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### Model 2 Direct ordering, settlement through the CSD

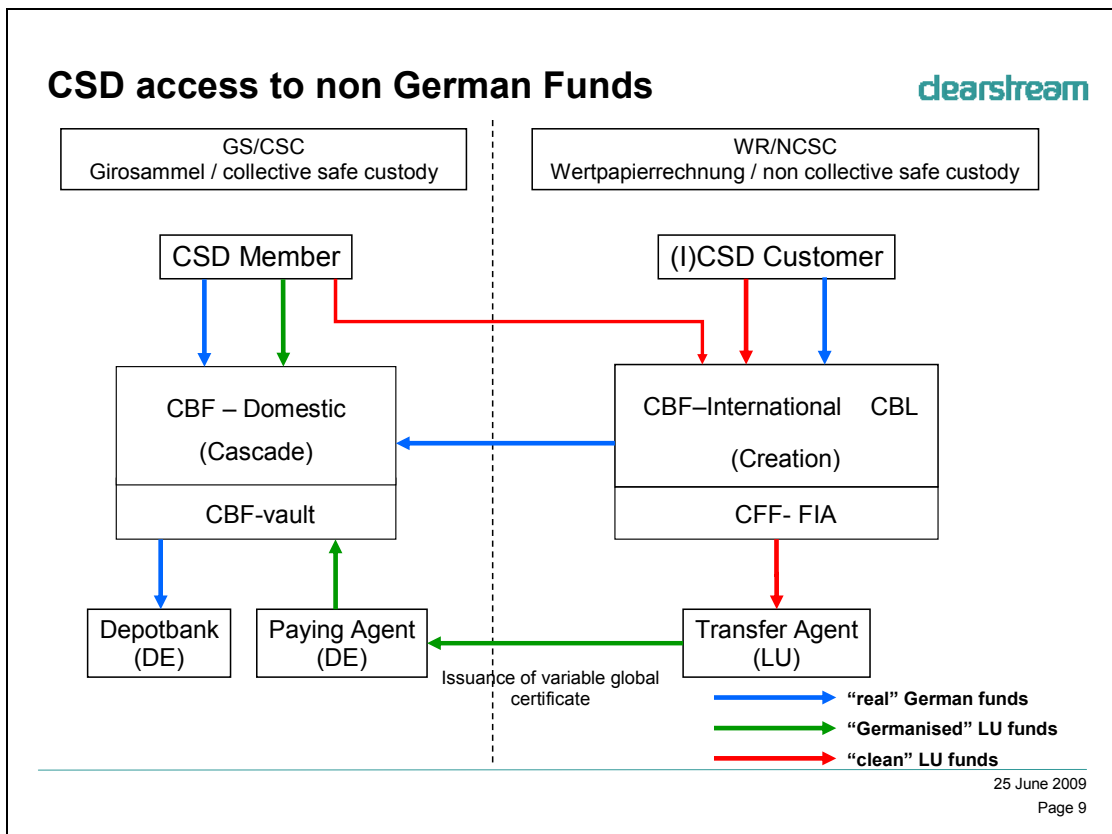
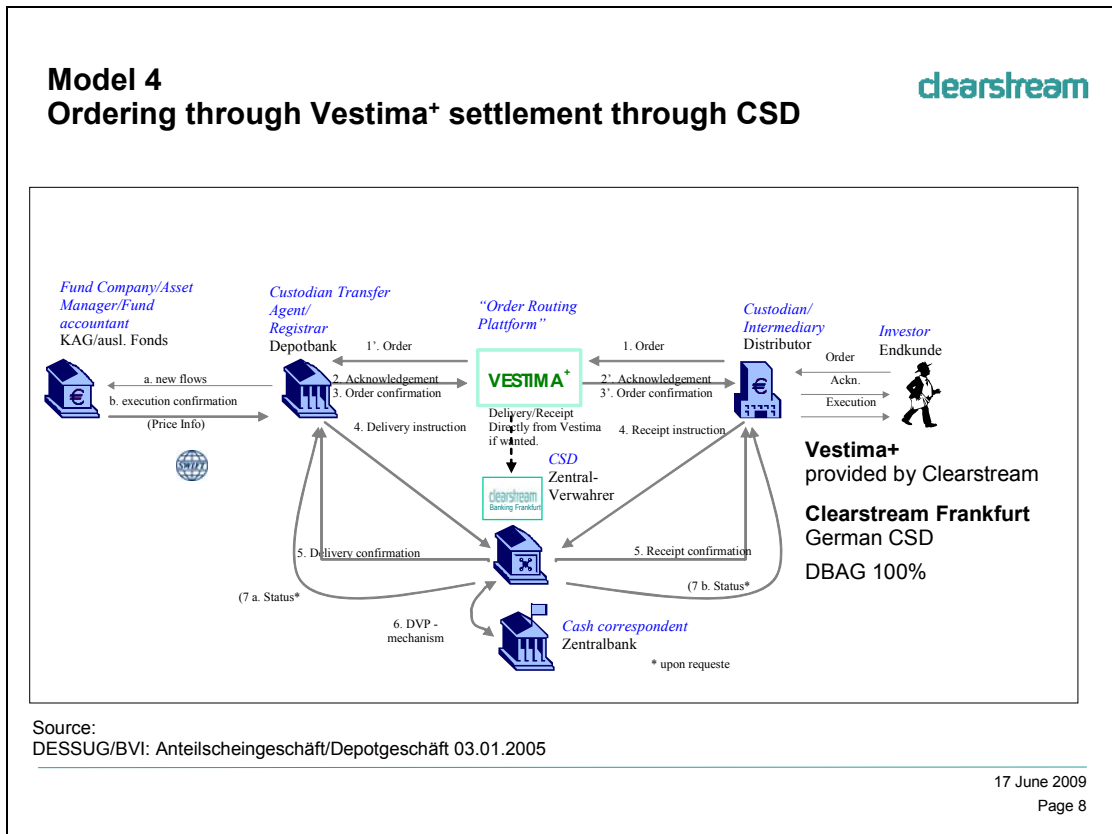


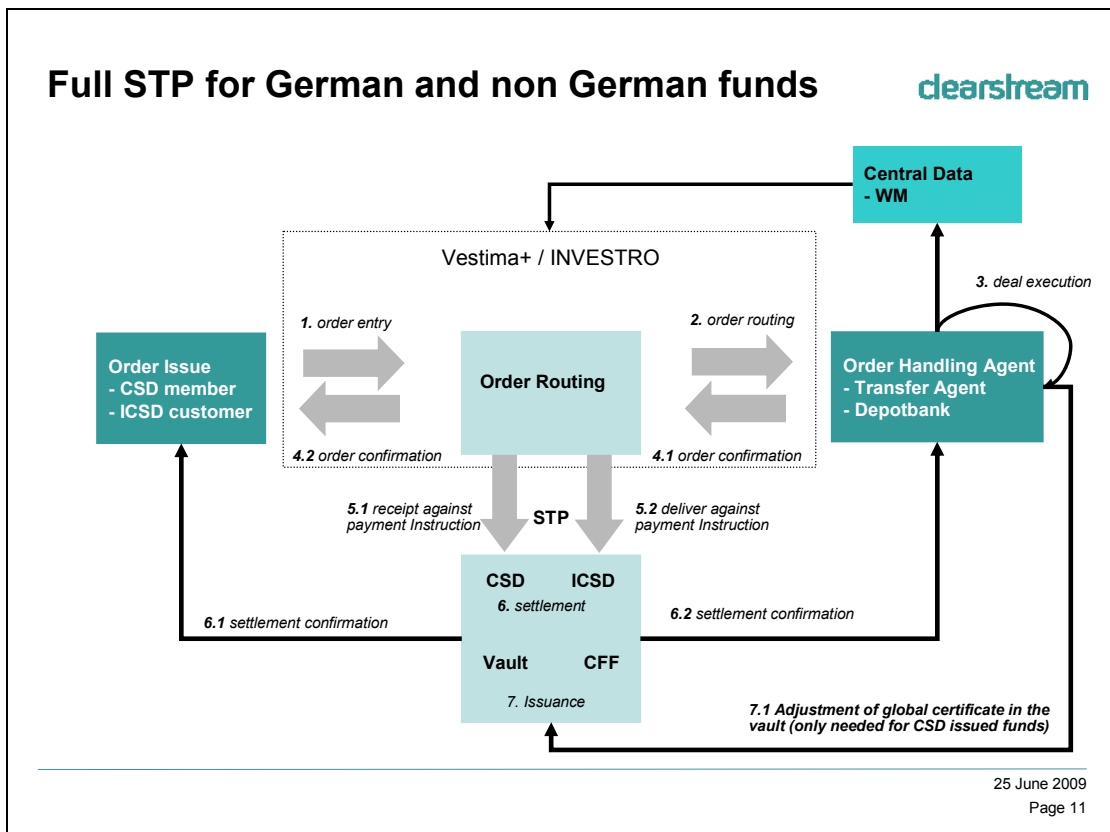
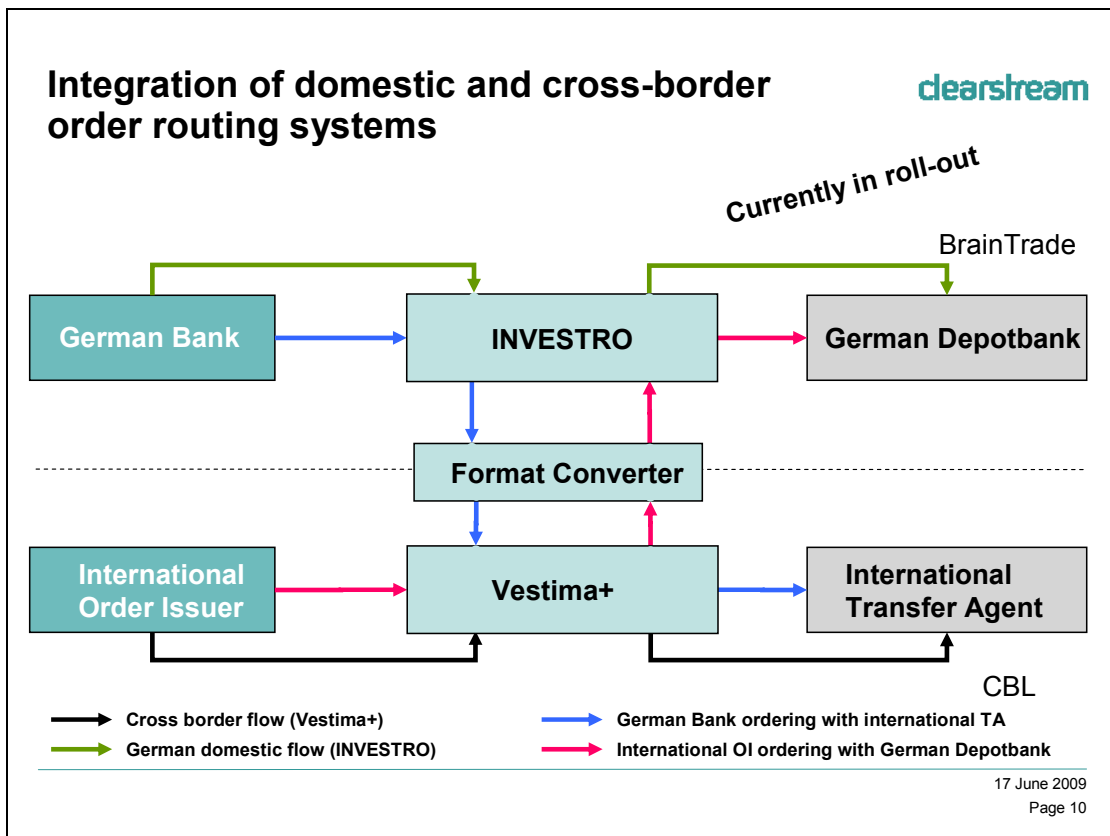
Source:  
DESSUG/BVI: Anteilscheingeschäft/Depotgeschäft 03.01.2005

### Model 3 Ordering through INVESTRO, settlement through CSD



Source:  
DESSUG/BVI: Anteilscheingeschäft/Depotgeschäft 03.01.2005





## Annex P

### Local hub solution - case study United Kingdom

#### Key market features:

- Unlike in continental Europe, retail distribution is not dominated by the large bankassurance groups. Banks however do play a role in the institutional funds business.
- The market is very fragmented, both on the sell and on the buy side. The top ten fund managers represent approximately 45% of the market. Independent Financial Advisers (IFA) and platforms are the key intermediaries for retail distribution.
- Because most dealing activity has always taken place between the individual investor and an IFA, open-ended mutual funds have historically not been included in the domestic CSD (formerly CrestCo, now Euroclear UK & Ireland or EUI)
- Fund processing is heavily paper-based. Physical transfer documents are necessary to complete a change of ownership.
- In 2007, Euroclear acquired EMXCo, the operator of the leading electronic fund order routing and fund confirmation system.
- By combining the capabilities of the EMX messaging system and EUI's CSD functionality, Euroclear is in the process of creating a new domestic market infrastructure for funds, covering order routing, settlement, and asset servicing.
- Orders generated by the distributor are routed to the fund manager/TA (in EUI terms called the Product Provider) through the EMX system. The executed order is confirmed in the reverse direction, through EMX. If the counterparties choose EUI for settlement, EMX automatically sends settlement instructions on behalf of both counterparties to EUI. Settlement is on T+4.
- In a first phase (now operational), the cash leg only is settled in EUI through Cash Memorandum Accounts. The 'physical' cash transfer however takes place between two cash clearing banks used by the distributor and the fund manager/TA. This is the same cash settlement process as for all EUI-eligible securities. In phase 1, the fund shares leg fully settles outside EUI.
- In phase 2 (from Q4, 2009) the fund shares leg will settle in EUI, too, by moving the shares from the fund manager/TA's stock account to the distributor's stock account (or vice versa). It is important to note that a fund share movement posted within EUI does not legally constitute a change of ownership. Fund share positions kept within EUI mirror the books of the TA. Funds' ownership registers are maintained by the TA, and only a change of ownership recorded in the books of the TA is legally binding. For that reason, fund share movements posted within EUI are referred to as "notional" settlement. To manage the interaction with the TA/registrar's books, a system of Register Update Requests exists between EUI and the TA, to make the settlement in EUI final upon confirmation of the TA.



# UK Investment Funds: Development of a Market Infrastructure

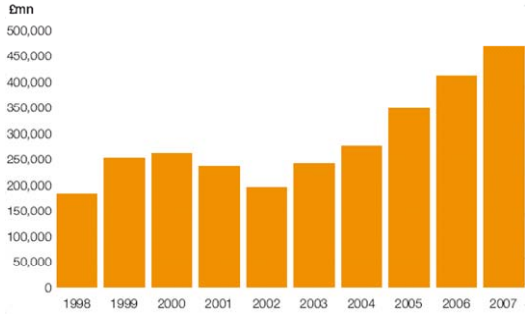


ISSA Working Group  
3 April 2009

**euroclear**

## UK Investment Fund Market Evolution of assets and European context

**Evolution of AUM (1198-2007)**



Year	AUM (£mn)
1998	180,000
1999	250,000
2000	260,000
2001	230,000
2002	190,000
2003	240,000
2004	280,000
2005	350,000
2006	410,000
2007	460,000

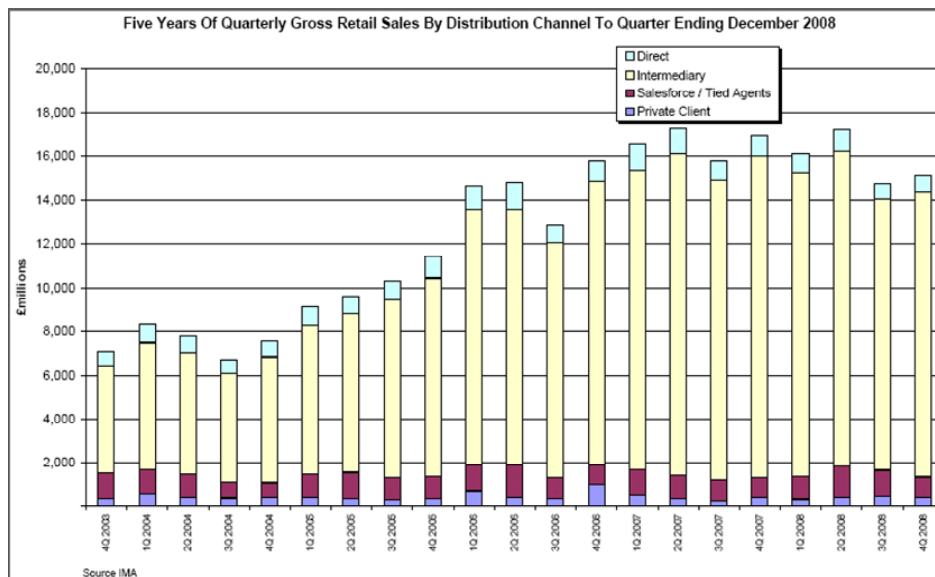
**UK market in context**

Countries	€mn	%
1 Luxembourg	2,059,395	26.0%
2 France	1,508,300	19.0%
3 Germany	1,040,937	13.1%
4 Ireland	806,768	10.2%
5 United Kingdom	796,954	10.1%
6 Italy	339,669	4.3%
7 Spain	278,796	3.5%
8 Austria	165,584	2.1%
9 Switzerland	159,853	2.0%
10 Sweden	139,380	1.8%

Source IMA

## UK Investment Fund Market

### Distribution channels



3

## UK Investment Fund Market

### Market characteristics

- Open architecture model: clear segregation of manufacturing and distribution
- Fragmented market on both buy and sell side
- Open-ended investment funds (OEICs and unit trusts) historically not in the domestic CSD
- Processing notoriously paper-based
- The EMX message system was launched in June 2000, providing mainly for automated order placement and order confirmation

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## UK Investment Fund Market

### Development of a market infrastructure

- Domestic CSD acquired by Euroclear Group: Euroclear UK and Ireland 'EUI'
- EMXCo acquired by the Euroclear Group
- Combining the strengths of Euroclear UK & Ireland and the EMX Message System to automate the UK funds industry
- Development of market infrastructure for investment funds - covering order routing, settlement and asset servicing – through market consultation:
  - Fund Liaison group and Technical Working Groups
  - Green Book (April 2008)
  - White Book (May 2008 and January 2009)

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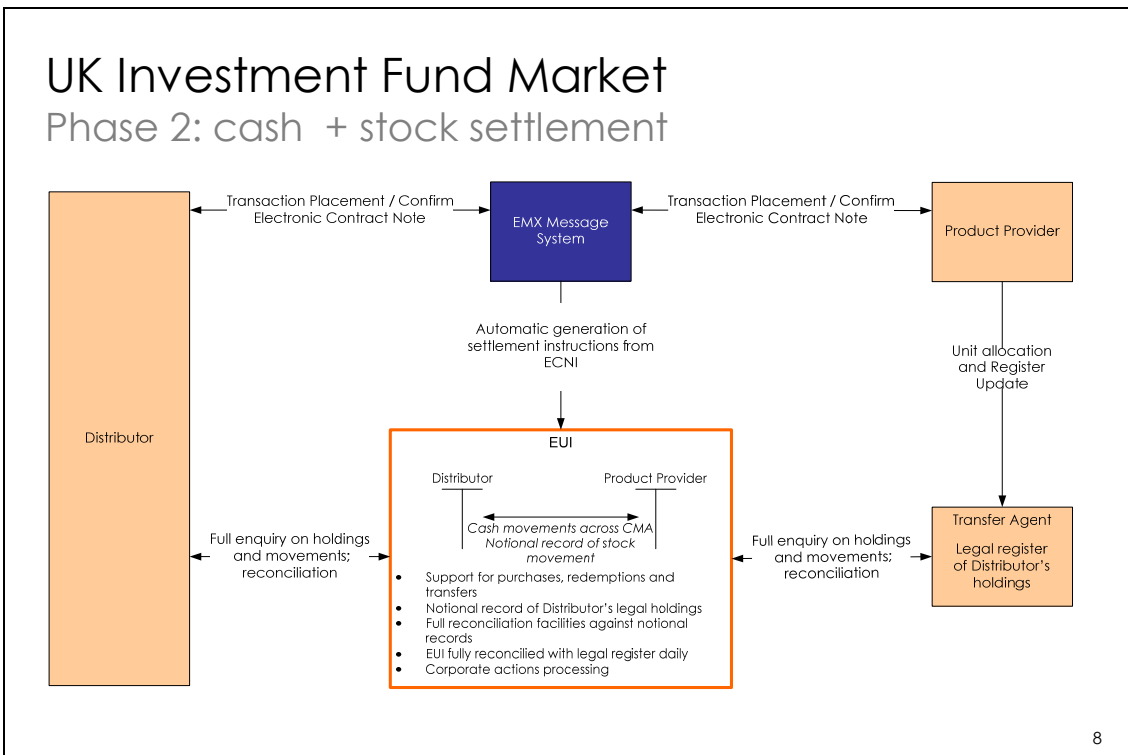
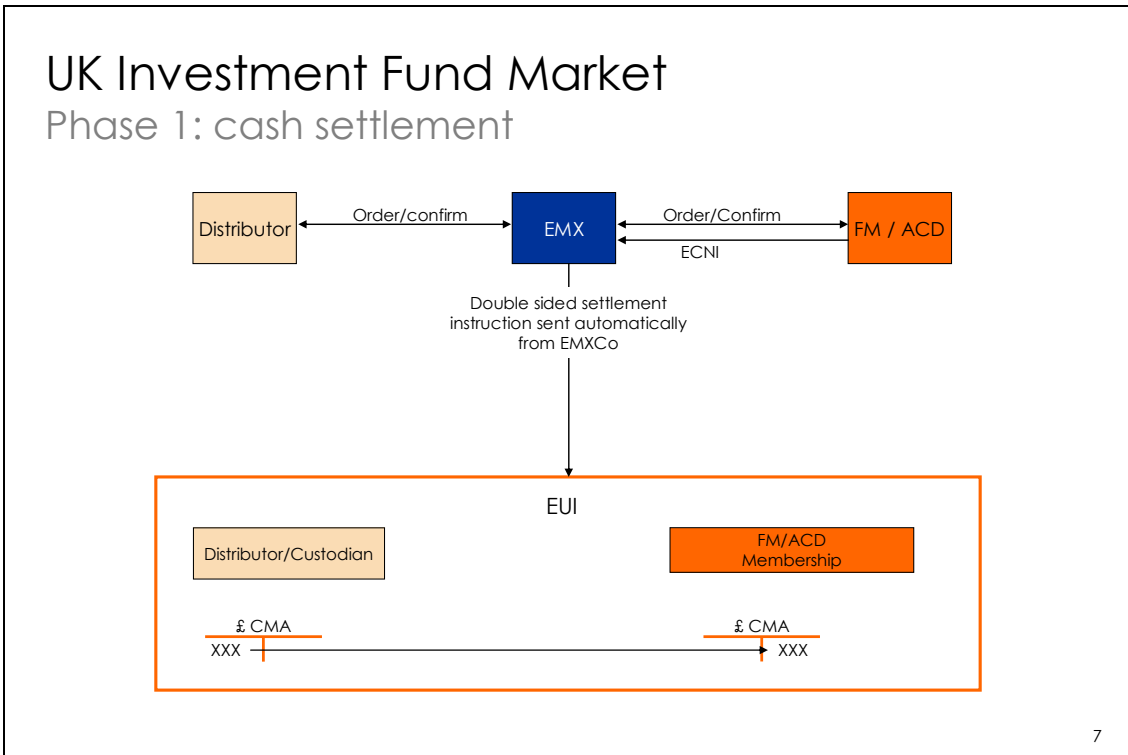
## UK Investment Fund Market

### Phased approach

- Phase 1 Cash now live, EMXCo and Euroclear UK&I infrastructure connected
- Phase 2 Cash and Stock, Consultation April & May 2008
  - Positive feed back from the market, including industry responses from both APCIMS and the IMA
- Specific TWGs as a result of market consultation
- FLG held on 25th September, TWG ratification and agreement on final model
- Phase 2 Settlement of Cash and movement of notional stock with EUI (Q4 2009)
- Asset Servicing: service definition 2009

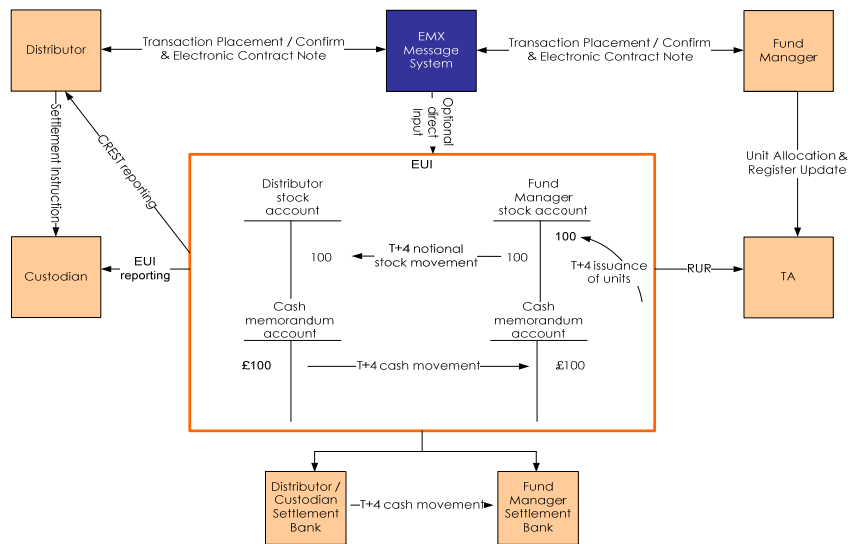
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## UK Investment Fund Market

### Example subscription



9

## UK Investment Fund Market

### Registrar interaction

- Register update requests (RURs)
  - Sent on notional settlement of fund orders in CREST
  - Registrar accepts or rejects
- Reconciliation
  - Daily reconciliation of changed balances and total fund units in CREST
  - Registrar sends balances to CREST
- Based on existing registrar interaction for equities

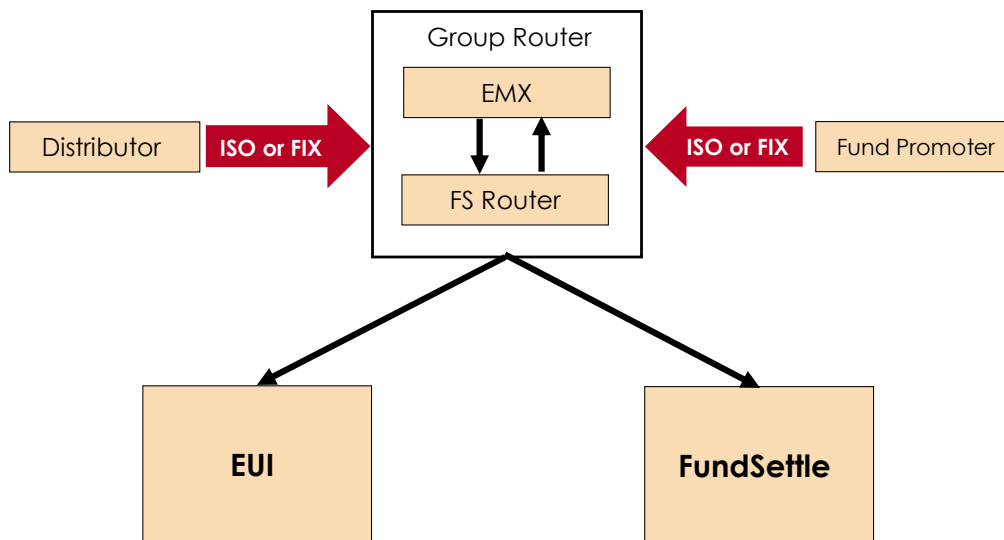
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## UK Investment Fund Market Settlement via EUI

- Legal Title
  - Uncertificated Security Regulations
  - Dematerialisation
- EUI Phase 2 Solution
  - No dependency on Regulatory change
  - Record of title remains with registrar
  - Fund Transactions within CREST reflect the actual movement across the Register

11

## Euroclear Group Fund Strategy Single access through interoperability



12

