### The CMU Fund Order Routing and Settlement Service

by the Financial Infrastructure Department

Investment funds have become an increasingly important international financial intermediation channel in addition to banking, equity and debt securities. However, until recently, there was no standardised processing platform for investment funds in Hong Kong, giving rise to high operational risks and back-office costs. This article describes how the newly launched CMU Fund Order Routing and Settlement Service helps address the industry's need for an automated and standardised platform to make investment fund processing more efficient.

#### Introduction

For investment funds to be distributed to a wide range of investors, fund managers have, over the years, built up distribution networks with banks and financial institutions who act as distributors for investment funds. In turn, these distributors rely on a network of transfer agents who are also banks and financial institutions acting as administrators of the investment funds for routing and settlement of subscription, redemption and switching orders initiated on behalf of end investors.

The networks of fund distributors and transfer agents are large and complex. Because of fragmentation in the processing of investment funds, particularly the lack of a common communications channel and standardised format for order placements between fund distributors and transfer agents, investment fund processing is highly manual and inefficient, and the operating costs and risks are relatively high. Against this backdrop, the HKMA launched the CMU Fund Order Routing and Settlement Service on 11 August 2009. The new Service is provided by the HKMA's Central Moneymarkets Unit (CMU) with a view to developing the necessary infrastructure to help standardise and automate the often complex and fragmented investment fund processing.

This article explains the high-level business flow of the Service and how it can help address the industry's needs for a more efficient investment-fund processing system, and its benefits to Hong Kong as an international financial centre.

### **Need for a standardised** investment-fund processing platform

In addition to banking, equity and debt securities, investment funds have become an increasingly important international financial intermediation channel. According to statistics from the Securities and Futures Commission (SFC), the total number of unit trusts and mutual funds authorised by the SFC increased from 1,608 at the end of March 1999 to 2,093 at the end of March 2009. The total net asset value of authorised unit trusts and mutual funds more than tripled from US\$183 billion at the end of 1998 to US\$628 billion at the end of 2008.

While interbank payments are settled through the Real Time Gross Settlement (RTGS) systems, equity transactions through the Central Clearing and Settlement System, and debt securities through the CMU, there was no standardised platform for the processing of investment funds in Hong Kong

despite their growing importance. The processing of these funds, including placement of subscription, redemption and switch orders, was mainly done by fax or in-house systems among fund distributors and transfer agents. This "many-to-many" approach involved high operational risks and back-office costs (Diagram 1). The lack of a standardised processing platform also limited the scope for shortening the settlement cycle. In addition, non-standardised fund processing could come under pressure during times of heavy subscription and redemption, such as IPOs or financial crises, resulting in significant settlement risks.

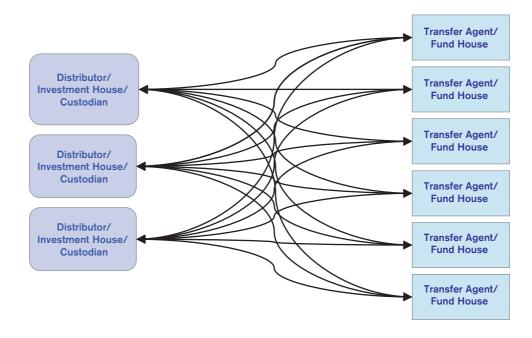
Overseas experience suggests that a standardised processing platform may improve the safety and efficiency of investment fund processing. In the US, the Depository Trust and Clearing Corporation, a custodian system for bonds and equities, has been

processing investment funds for more than 20 years. In Taiwan and South Korea, authorities are planning to standardise fund settlement to promote safety and efficiency. In France, a central hub operated by Euroclear France is responsible for processing investment funds.

Establishing a standardised platform in Hong Kong is also strategically important to attract investment funds from Mainland China. The Mainland's outward remittance of foreign exchange investment with foreign exchange purchased under the Qualified Domestic Institutional Investor (QDII) scheme amounted to US\$35.3 billion at the end of 2007.¹ Hong Kong is the preferred market for QDII and investment funds have become increasingly popular with QDII investors. In the long term, it is expected that the number of overseas funds invested through Hong Kong will continue to increase.

#### DIAGRAM 1

#### Non-standardised investment-fund processing mode



By the end of 2007, the State Administration of Foreign Exchange (SAFE) had approved US\$16.6 billion conversion quota for commercial bank QDlls, US\$33.5 billion investment quota for fund houses and securities firms, and US\$14.4 billion investment quota for insurance companies (source: SAFE website).

In considering establishing a standardised investment-fund processing platform in Hong Kong, the HKMA consulted on the feasibility of such a platform with a number of large market players in the investment fund industry. While most supported the idea, the private sector faced considerable difficulty in playing a leading role because of cost, competition and ownership considerations.

## **CMU Fund Order Routing and Settlement Service**

Building on the CMU's existing safe and efficient infrastructure for debt securities clearing and settlement, including experience in developing and operating links with international central securities depositories (ICSDs), the HKMA took the lead to develop the CMU Fund Order Routing and Settlement Service for investment funds. The new Service is targeted at local and international market participants including investment houses, distributors, and custodians initiating investment fund orders, and transfer agents and fund houses receiving them. It provides a standardised platform for the processing of investment fund orders, and

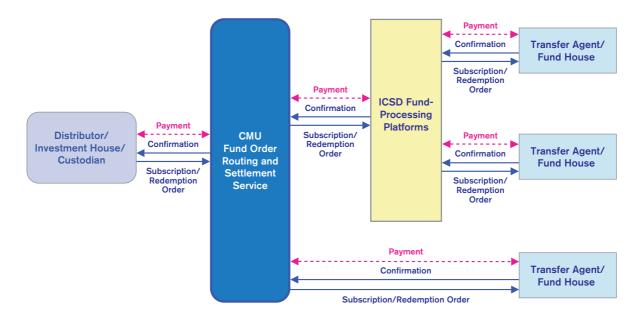
also settlement and custody of investment funds. The scope of operation of the new Service includes:

- handling subscription, redemption and switching orders
- generating corresponding confirmation and payment instructions
- providing regular reports
- settlement and custody of investment funds.

A high-level operational flow of the new Service is illustrated in Diagram 2 below:

As shown in the diagram, the Service serves as a hub between local and international service users on the buy side of the processing chain, that is, fund distributors, investment houses and custodians; and those on the sell side of the processing chain, that is, transfer agents and fund houses. The Service provides a single, automated entry point for users to communicate instruction orders, confirmations, contract notes and other relevant information with

DIAGRAM 2
High-level business flow of the CMU Fund Order Routing and Settlement Service



each other. Contrary to the existing non-standardised and manual, "many-to-many" processing mode, the Service enables users on the buy side to reach numerous transfer agents for a wide range of investment funds using a single processing standard. On the sell side, the Service allows transfer agents to receive orders from numerous fund distributors in one automated, standardised format.

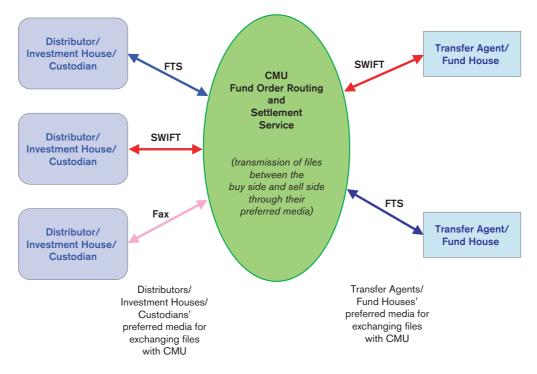
The Service supports various channels for the transmission of instruction orders. Depending on their operational needs, service users may choose to communicate using file transfer (FTS), SWIFT and authenticated fax. As illustrated in Diagram 3, a fund distributor may choose to send order instructions to its transfer agent through the CMU platform by means of, say, FTS using a standardised file template. The CMU platform will convert the file it received from the fund distributor into a standardised format and transmit it to the transfer agent through a means preferred by that agent, such as SWIFT. Likewise, the transfer agent may send the corresponding order acknowledgement and confirmation files to the fund distributor through the CMU platform using its preferred means. The CMU platform will then convert the SWIFT files received

from the transfer agent into a standardised format for onward transmission to the fund distributor using a channel which is preferred by the distributor, say, FTS. This free choice of communications media also applies to the transmission of other information such as settlement instructions, corporate event notices and other regular reporting.

Depending on their operational needs, fund distributors may also choose to use only the order routing facilities provided by the Service for sending order instructions to transfer agents. In such cases, both fund units and cash settlements will be done outside the Service using other settlement routes preferred by fund distributors. Alternatively, fund distributors may subscribe to the full service, which includes both order routing and settlement of the resultant cash and investment fund transactions. This full service provides, in addition to a single point of entry for order routing, a central hub for settlement of investment fund orders from one single account on the CMU platform. Settlement instructions will be generated automatically in the name of the fund distributors and transmitted to the transfer agents, thereby enhancing the straight-through processing (STP) level. Cash settlement can be done in Hong

DIAGRAM 3

Multiple communications channels supported by the CMU Fund Order Routing and Settlement Service



Kong through the links between the new Service and Hong Kong's existing multi-currency payment platform. Such flexibility in the choice of settlement channels allows fund distributors and transfer agents to reap the benefits of automation and streamlined processing without compromising their preferred post-trade settlement model.

To widen the scope of investment funds' coverage, the CMU has leveraged on its existing linkages with ICSDs to ride on their investment-fund servicing platforms. Through these linkages, local fund distributors can gain access to a wide range of European and international investment funds available in the market. International funds may, through transfer agents who are already on board for these ICSD platforms, tap into local fund distributors to widen their investor spectrum. For investment funds that are not covered by the ICSD platforms, such as some of those in Hong Kong, the CMU will establish a direct relationship with the investment funds or their transfer agents to bring them within the coverage of the new Service.

#### **Benefits to market participants**

The introduction of the CMU Fund Order and Routing Settlement Service has brought about standardisation and flexibility to investment fund processing, providing real benefits to market participants. The free choice of communications channel for the transmission of order instructions and related information under the new Service allows participants to simplify the communications process to suit their own business models. The standardised, one single entry point for access to multiple counterparts also enables market participants to significantly streamline and optimise the fund processing procedure, thereby reducing the operational risks and lowering back-office costs. For fund distributors, full STP from order initiation to final settlement can now be achieved, which will result in quicker turnaround time for fund order confirmations. This in turn will help improve the level of service they can provide to end investors. Transfer agents can

now receive automated, simplified and standardised order instructions through their preferred channels, which will reduce the amount of manual work and related operational risks. In addition, the higher STP rate will enable transfer agents to attract more business without having an adverse impact on staffing and internal resources.

The new Service also has potential benefits for investors on the Mainland with the increased investment outflows under the QDII programme and the expected increase in the number of overseas funds invested through Hong Kong in the longer term. Using the new Service platform, Mainland investment fund investors, in particular managers of investment funds under the QDII programme, can gain access to a wide range of overseas and local investment-fund transfer agents through a single entry point in Hong Kong with same-time-zone and same-language services provided by the CMU.

# Benefits to Hong Kong as an international financial centre

From a macro perspective, the introduction of a standardised investment-fund processing platform strengthens Hong Kong's status as an international financial centre in several areas:

Monetary and financial stability: The use of investment funds as a means of financial intermediation is becoming more popular, in addition to the more conventional channels like bonds and equities. A lesson from the global financial crisis is that financial products are usually handled more efficiently with fewer contagion problems in a well established payment and settlement system. At least, from a surveillance point of view, policy-makers and regulators have a better understanding of the volumes involved. There is an obvious need to include investment funds in a well established payment and settlement system. Hence the recent introduction of the new service from the CMU for fund processing has been very timely.

Financial integration between the Mainland and Hong Kong: In light of the increasing financial and economic integration between Mainland China and Hong Kong, there is a need to provide safe and efficient cross-border clearing and settlement services for all types of financial products, including investment funds, to reduce systemic and settlement risks in relation to Mainland-Hong Kong financial transactions. The new Service will assist in achieving this goal.

Reduced liquidity pressure and operational and settlement risks: With the introduction of the standardised settlement process, it is likely that the overall settlement cycle for investment funds can be shortened. This will help reduce liquidity pressure on financial institutions and streamline operational procedures, thereby reducing settlement and operational risks.

In addition, the standardised fund processing platform will further enlarge the service coverage and improve the safety and efficiency of Hong Kong's multi-dimensional financial infrastructure, thus reinforcing Hong Kong's role in serving as a regional settlement hub and an international financial centre.

#### Looking ahead

Since its launch in August 2009, the CMU Fund Order and Routing Settlement Service has been operating smoothly. A number of financial institutions have already signed up with encouraging transaction volumes. The response from users indicates the Service has significantly streamlined the investment-fund processing cycle, and the multiple channels of communications are proving beneficial to various operational requirements.

The Service is being fine-tuned to further improve its STP capabilities. The HKMA will continue its regular dialogue with market participants to exchange views and explore ways to improve the operations of the Service, taking into account latest developments and needs of the investment fund industry. In particular, the HKMA will work with the industry on ways to continue the standardisation and harmonisation of the investment-fund processing procedures.

Marketing activities will be conducted to promote the Service to potential users both locally and in the region. To expand the Service's investment fund coverage, the CMU will, besides riding on international platforms provided by ICSDs, continue its endeavours to establish direct relationships with the investment funds or their transfer agents to bring them within the Service coverage. The further strengthening of a standardised investment-fund processing platform is in line with the HKMA's objective in developing a safe and efficient, multi-currency and multi-dimensional financial infrastructure in Hong Kong. This will in turn contribute to Hong Kong's role in serving as a regional settlement hub and an international financial centre.