



Information Paper

APAC Funds Processing Automation and Standardisation Report

Tracking industry progress
H1 2018 Report

Contents

Information Paper	1
1 Background	3
2 Report Highlights	4
I. <i>Automation and standardisation of fund orders in Hong Kong, Taiwan and Singapore</i>	4
II. Automation and standardisation of fund orders in Hong Kong	4
III. Automation and standardisation of fund orders in Taiwan	4
IV. Automation and standardisation of fund orders in Singapore	4
3 Automation and Standardisation of Fund Orders in Hong Kong, Taiwan and Singapore	5
3.1 Total order volume evolution	5
3.2 Total automation and standardisation rates	6
4 Automation and Standardisation of Fund Orders in Hong Kong	7
4.1 Hong Kong Order Volume Evolution	7
4.2 Hong Kong Automation and Standardisation Rates	8
5 Automation and Standardisation of Fund Orders in Taiwan	9
5.1 Taiwan order volume evolution	9
5.2 Taiwan automation and standardisation rates	10
6 Automation and Standardisation of Fund Orders in Singapore	11
6.1 Singapore order volume evolution	11
6.2 Singapore automation and standardisation rates	12
7 Remarks	13
8 Next report	14

Over the past decade, the Asia Pacific region has observed impressive growth in the funds segments. Drivers of asset growth in the region include growing wealth, regulatory reforms, greater client sophistication, and introduction of new distribution channels. While asset growth has been encouraging, the pace of automation in the funds industry has not kept pace. Today, there is a strong demand to improve the levels of operational efficiency, particularly through the standardisation and automation in the funds processing space.

Recognising these drivers and trends, there has also been a call for greater harmonisation of financial standards and market practices. Along with the mandatory ISO20022 migration in foreseeable future, it is important for the industry to be aware and focus on the fund processing standardisation and automation rates across APAC.

The main objective of the APAC Funds Processing Automation and Standardisation report is to provide periodic information on key funds markets in the region of the industry's progress towards increased levels of automation of fund orders and the use of ISO standards. Users of this report include market players involved in funds processing transaction flow, asset managers, regulators & policy makers and other interested stakeholders.

This report covers data for the first half of 2018, collected from transfer agents based in key APAC fund processing centres - Hong Kong, Taiwan and Singapore. The report combines the data across these markets into a single fund processing report providing the following views:

- an aggregated view on these 3 fund processing centres together;
- a detailed overview per fund processing centre (Hong Kong, Singapore and Taiwan separately);
- a regional perspective of fund processing STP rates per fund processing centre;
- the scope of funds coverage are both domestic & cross border.

This publication of the APAC Fund Processing Automation and Standardisation report was developed with the support of the Asia Funds Automation Consortium (AFAC), the Hong Kong Investment Funds Association (HKIFA), the Association of the Luxembourg Fund Industry (ALFI) and their members. SWIFT and its supporting partners plan to publish two reports per year, which will be made available on SWIFT and respective partner official websites.

For the European region, SWIFT collaborates on a similar effort with the European Fund and Asset Management Association (EFAMA) to publish reports on trends since 2009, in standardisation and automation rates of fund orders received by transfer agents (TAs) in Luxembourg and Ireland. The published bi-yearly reports showing the evolution of standardisation and automation of fund orders are available on both EFAMA and SWIFT official website.

¹According to PwC's Asset and Wealth Management Market Research Centre.

2. Report Highlights

I. Automation and standardisation of fund orders in Hong Kong, Taiwan and Singapore

- **Survey coverage: 24 transfer agents² (TAs)** contributed to the survey
 - a. **11 Hong Kong-based TAs**
 - b. **8 Taiwan-based TAs**
 - c. 5 Singapore-based TAs
- **Total automation rate³** of orders reached **66.4% in H1 2018** compared to 68.4% in H2 2017.
- **ISO automation rate⁴** reached **30%** in H1 2018 compared to 32% in H2 2017.
- **Proprietary FTP rate** reached **36.5%** in H1 2018 compared to 36.4% in H2 2017
- The **order volumes** processed by the 24 survey contributors reached 3.3 million orders in the first half of 2018.
- The **24 surveyed TAs manually processed 1.1 million orders in H1 2018**. Manual process rates reached 33.6% in H1 2018 compared to 31.6% in H2 2017.

II. Automation and standardisation of fund orders in Hong Kong

- **H1 2018 survey coverage: 11 TAs contributed.**
- The total **automation rate of orders** processed by Hong Kong TAs reached **61.5%** during H1 2018 compared to 60% in H2 2017.
- The **ISO automation rate** reached 23.3% in H1 2018 compared to 22% in H2 2017. The rate of **proprietary FTP** reached **38.2%** in H1 2018 compared to 38% in H2 2017, and the **manual orders** decreased to **38.5%** in H1 2018 compared to 40% in H2 2017.
- The **order volumes** processed by Hong Kong TAs reached **1.5 million** during H1 2018.

III. Automation and standardisation of fund orders in Taiwan

- **H1 2018 survey coverage: 8 TAs contributed.**
- The **total automation rate** of orders processed by Taiwan TAs reached **81.5%** in H1 2018 compared to 81.1% in H2 2017.
- The percentage of automated orders based on **ISO messaging standards** reached **39.6%** during H1 2018 compared to 45.7% in H2 2017. The rate of **proprietary FTP** orders reached **41.9%** in H1 2018 compared to 35.4% in H2 2017. The **manual orders** decreased to **18.5%** in H1 2018 compared to 18.9% in H2 2017.
- The **order volumes** processed by Taiwan TAs remains at **1.4 million** in H1 2018.

IV. Automation and standardisation of fund orders in Singapore

- **H1 2018 survey coverage: 5 TAs contributed.**
- The **total automation rate** of orders processed by Singapore TAs decreased to **34.7%** in H1 2018 compared to 59.4% in H2 2017.
- The percentage of automated orders based on **ISO messaging standards** reached 21.4% in H1 2018 compared to **28.2%** during H2 2017. The rate of **proprietary FTP** orders decreased to **13.4%** in H1 2018 compared to 31.2% in H2 2017. The **manual orders** increased to **65.3%** in H1 2018 compared to 40.6% in H2 2017.
- The **order volumes** processed by Singapore TAs reached **0.45 million** in H1 2018.

²One transfer agent could not participate for this mid-year report and a new one participates.

³The 'total automation rate' is the sum of the 'ISO automation rate' + the 'proprietary formatted ftp' rate. This is based on combined figures of the surveyed markets.

⁴The 'ISO automation rate' corresponds to the standardisation rate, i.e. the rate of automated orders using an ISO format (ISO 20022 or ISO 150222 'fund template').

3. Automation and Standardisation of Fund Orders in Hong Kong, Taiwan and Singapore

3.1 Total order volume evolution

During the first half of 2018, 3.3 million orders have been processed by the 24 survey contributors across Hong Kong, Taiwan and Singapore⁵. This represents an average volume of 0.56 million orders per month.

(in millions)	H1 2018
Total number of orders	3.3
Monthly average	0.56

Table 1 – Total order volume H1 2018

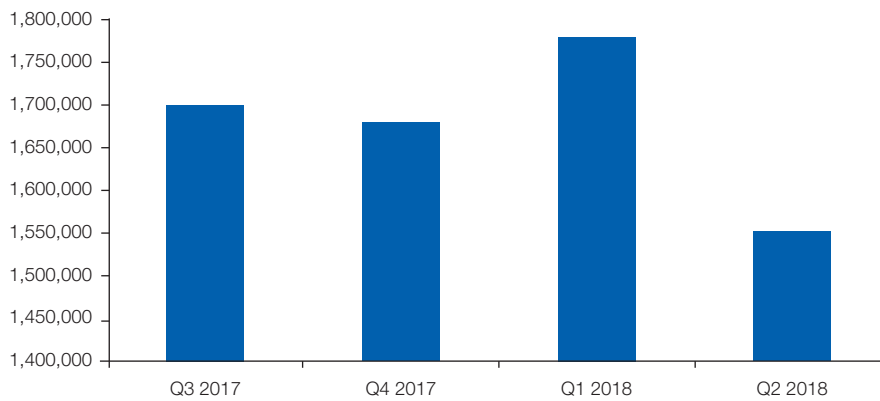


Figure 1 – Total order volume evolution 2017 - 2018

⁵Survey data collected are based on voluntary contributions by participating entities. Estimated market coverage is currently not available in this edition of the report publication.

3. Automation and Standardisation of Fund Orders in Hong Kong, Taiwan and Singapore

3.2 Total automation and standardisation rates

Total automation rate

The total automation rate reached 67.7% in Q2 2018 compared to 69.4% in Q4 2017.

Table 1 – Total order volume H1 2018

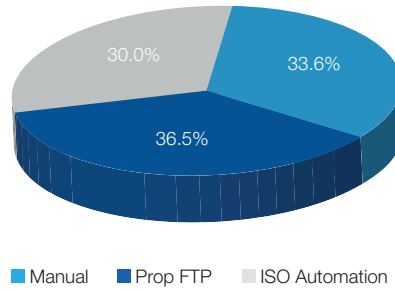


Figure 2 – Total fund order processing rates H1 2018

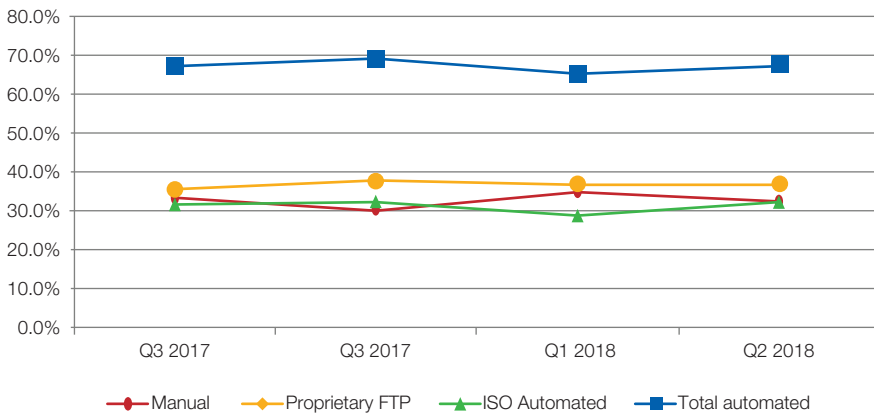


Figure 3 – Total fund order processing volume evolution 2017 - 2018

The adoption of proprietary FTPs reached 36.4% in Q2 2018 compared to 37.5% in Q4 2017, and the share of manual orders reached 32.3% in Q2 2018 compared to 30.6% in Q4 2017.

The table below provides detailed rates per quarter.

	Q3 2017	Q4 2017	Q1 2018	Q2 2018
ISO automation rate	32%	31.9%	28.8%	31.3%
Proprietary FTP rate	35.3%	37.5%	36.5%	36.4%
Manual rate	32.7%	30.6%	34.7%	32.3%

Table 3 – Total fund order processing rates evolution 2017 - 2018 (by quarter)

4. Automation and Standardisation of Fund Orders in Hong Kong

4.1 Hong Kong Order Volume Evolution

In H1 2018, the 10 Hong Kong survey contributors processed 1.5 million orders. This represented a monthly average of 0.24 million orders.

(in millions)	H1 2018
Total number of orders	1.5
Monthly average	0.24

Table 4 – Hong Kong order volume H1 2018

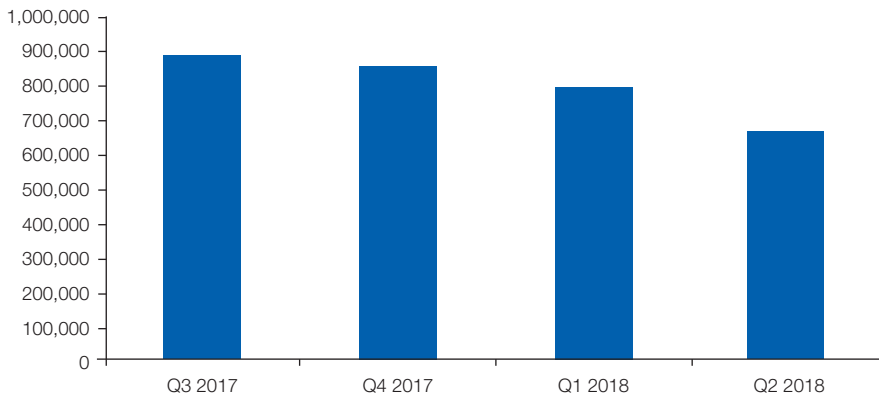


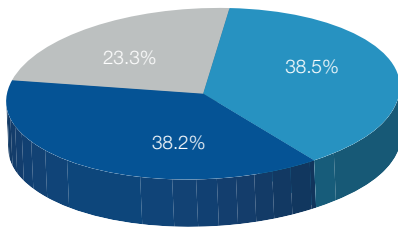
Figure 4 – Hong Kong order volume evolution 2017 - 2018

4. Automation and Standardisation of Fund Orders in Hong Kong

4.2 Hong Kong Automation and Standardisation Rates

Hong Kong automation rate

The total automation rate increased to 62.5% in Q2 2018 compared to 61.7% in Q4 2017.



■ Manual ■ Prop FTP ■ ISO Automation

Figure 5 – Hong Kong fund order processing rates H1 2018

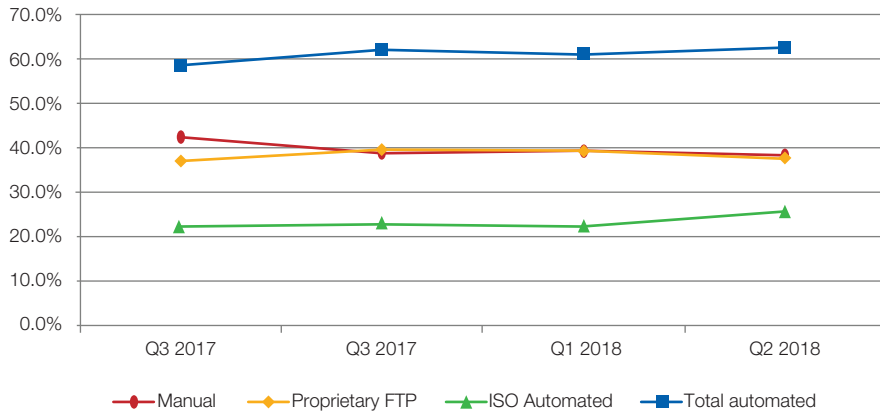


Figure 6 – Hong Kong total fund order processing volume evolution 2017 - 2018

The table below provides detailed rates per quarter.

	Q3 2017	Q4 2017	Q1 2018	Q2 2018
ISO automation rate	21.7%	22.2%	21.7%	25.2%
Proprietary FTP rate	36.6%	39.5%	39.0%	37.3%
Manual rate	41.7%	38.3%	39.3%	37.5%

Table 6 – Hong Kong total fund order processing rates evolution 2017 - 2018 (by quarter)

Hong Kong standardisation rate

The use of ISO increased to 23.3% in H1 2018 compared to 22% in H2 2017, and the adoption of proprietary formats reached 38.2% in H1 2018 versus 38% in H2 2017. The share of manual orders decreased to 38.5% in H1 2018 compared to 40% in H2 2017.

	Q3 2017	Q4 2017	Q1 2018	Q2 2018
Total automation rate	58.3%	61.7%	60.7%	62.5%

Table 5 – Kong Kong total automation rate evolution 2017 - 2018 (by quarter)

5. Automation and Standardisation of Fund Orders in Taiwan

5.1 Taiwan order volume evolution

In H1 2018, the 8 Taiwan survey contributors processed 1.4 million orders. This represented a monthly average of 0.23 million orders.

(in millions)	H1 2018
Total number of orders	1.4
Monthly average	0.23

Table 7 – Taiwan order volume H1 2018

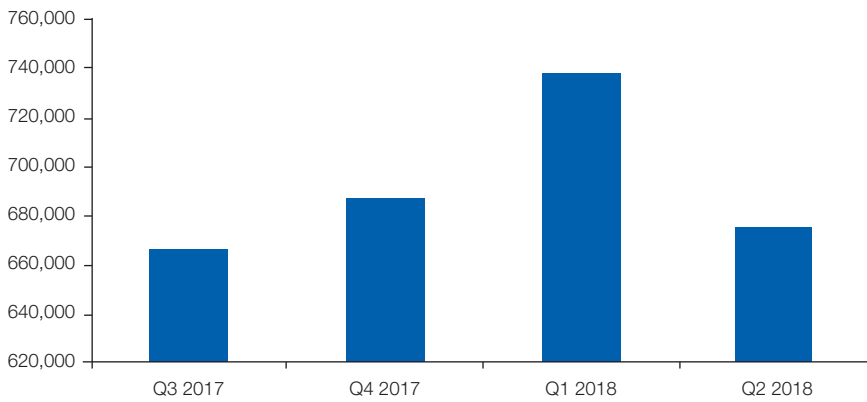


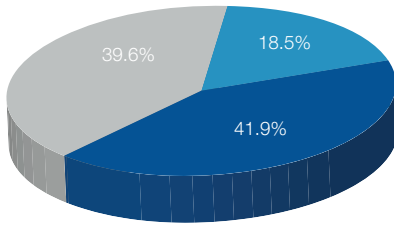
Figure 7 – Taiwan order volume evolution 2017 - 2018

5. Automation and Standardisation of Fund Orders in Taiwan

5.2 Taiwan automation and standardisation rates

Taiwan automation rate

The total automation rate increased to 82.7% in Q2 2018 compared to 81.7% in Q4 2017⁶.



Manual Prop FTP ISO Automation

Figure 8 – Taiwan fund order processing rates H1 2018

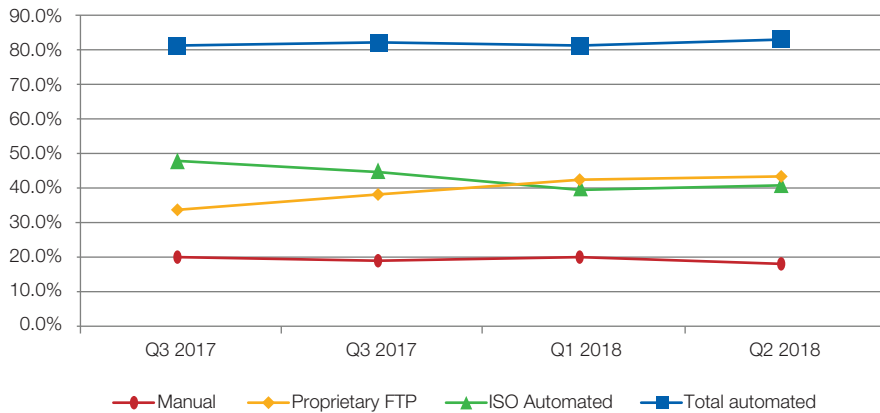


Figure 9 – Taiwan total fund order processing volume evolution 2017 - 2018

The table below provides detailed rates per quarter.

	Q3 2017	Q4 2017	Q1 2018	Q2 2018
ISO automation rate	47.3%	44.2%	39.1%	40.2%
Proprietary FTP rate	33.2%	37.5%	41.4%	42.5%
Manual rate	19.5%	18.3%	19.5%	17.3%

Table 9 – Taiwan total fund order processing rates evolution 2017 - 2018 (by quarter)

Taiwan standardisation rate

The use of ISO reached 39.6% in H1 2018 compared to 45.7% in H2 2017, and the adoption of proprietary formats increased to 41.9% in H1 2018 compared to 35.4% in H2 2017. The share of manual orders decreased to 18.5% in H1 2018 compared to 18.9% in H2 2017.

	Q3 2017	Q4 2017	Q1 2018	Q2 2018
Total automation rate	80.5%	81.7%	80.5%	82.7%

Table 8 – Taiwan total automation rate evolution 2017 - 2018 (by quarter)

⁶The percentage of total automation rate recorded for Taiwan is likely due to the automated funds order service offered by the Taiwan Depository & Clearing Corporation (TDCC).

6. Automation and Standardisation of Fund Orders in Singapore

6.1 Singapore order volume evolution

In H1 2018, the 5 Singapore survey contributors processed 0.45 million orders. This represented a monthly average of 0.074 million orders.

(in millions)	H1 2018
Total number of orders	0.45
Monthly average	0.074

Table 10 – Singapore order volume H1 2018

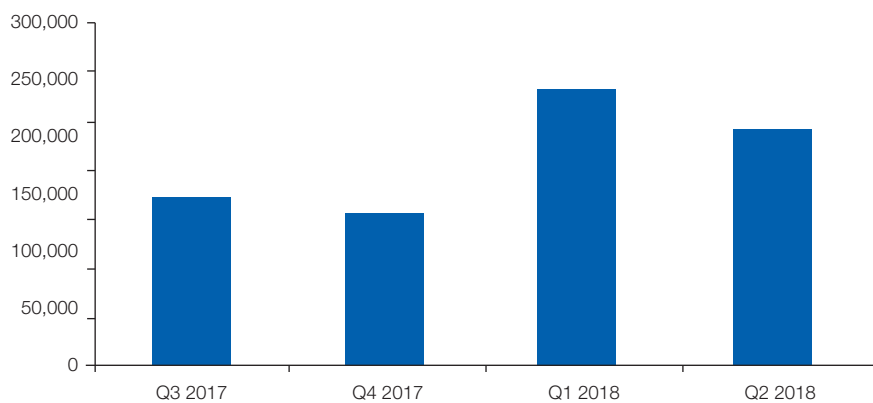


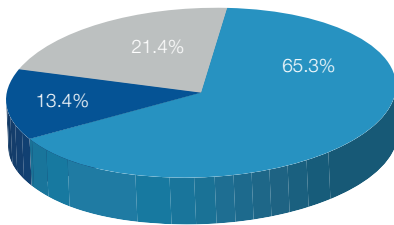
Figure 10 – Singapore order volume evolution 2017 - 2018

6. Automation and Standardisation of Fund Orders in Singapore

6.2 Singapore automation and standardisation rates

Singapore automation rate

The total automation rate decreased to 35.7% in Q2 2018 compared to 56.2% in Q4 2017⁷.



■ Manual ■ Prop FTP ■ ISO Automation

Figure 8 – Taiwan fund order processing rates H1 2018

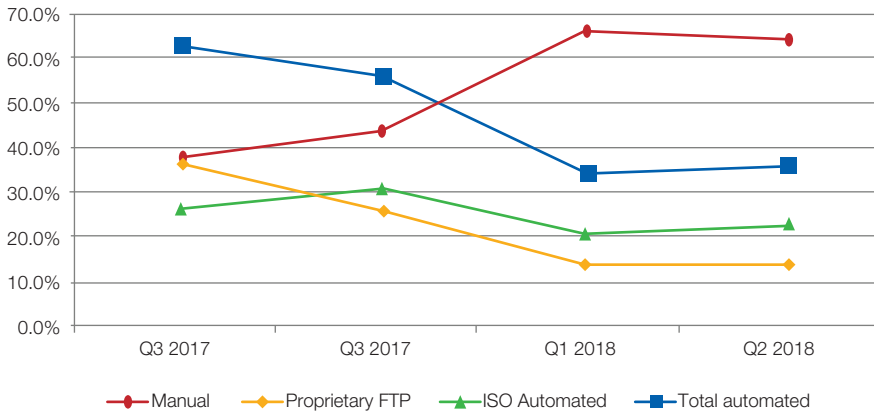


Figure 12 – Singapore total fund order processing volume evolution 2017 - 2018

The table below provides detailed rates per quarter.

	Q3 2017	Q4 2017	Q1 2018	Q2 2018
ISO automation rate	25.9%	30.8%	20.4%	22.4%
Proprietary FTP rate	36.5%	25.4%	13.5%	13.3%
Manual rate	37.6%	43.8%	66.1%	64.3%

Table 12 – Singapore total fund order processing rates evolution 2017 - 2018 (by quarter)

Singapore standardisation rate

The use of ISO reached 21.4% in H1 2018 compared to 28.2% in H2 2017, and the adoption of proprietary formats drop to 13.4% in H1 2018 compared to 31.2% in H2 2017. The share of manual orders increased to 65.3% in H1 2018 compared to 40.6% in H2 2017.

	Q3 2017	Q4 2017	Q1 2018	Q2 2018
Total automation rate	62.4%	56.2%	33.9%	35.7%

Table 11 – Singapore total automation rate evolution 2017 - 2018 (by quarter)

⁷The decrease in automation rate should not be perceived as a market trend. This was influenced by an anomaly in a particular dataset.

7. Remarks

As SWIFT, AFAC, ALFI & HKIFA noted:

Alexandre Kech, Head of Securities & FX,

SWIFT: “I am always shocked to hear that faxes are still used in 2018 for the distribution of funds. Providing the industry with a neutral statistical view on funds distribution automation and standardisation is important to us as it can only support the industry’s effort towards operational efficiency, risk and cost reduction.”

AFAC: “The slow growth of the automation of fund orders against the back drop of the digital era of 4th industrial revolution is disappointing. Those who are still processing manually need to review their business models to avoid being left behind. The PRC already has 99% plus automation rates.”

Ching Yng Choi, Head of the ALFI Asia

Representative Office: “ALFI is highly supportive of this initiative by SWIFT which follows the path of the work carried out in Europe between SWIFT and EFAMA. This survey helps understanding the level of automation in Asia and subsequently identifying action points that associations such as ALFI can promote among its working group members.”

HKIFA: “The report provides fund managers insights to the state of automation and standardization of cross-border funds within key markets in the Asia-Pacific. The rate of adoption has witnessed some increases, though there is still much room for improvement. The industry will continue to strive to further enhance operational efficiency so that we can achieve better outcomes for investors.”

8. Next report

The next joint SWIFT APFAS Report is planned for publication in Q2 2019 and will cover the July 2017 – December 2018 progress in standardisation rates across the three funds processing centres, Hong Kong, Taiwan and Singapore.

For more information, visit www.swift.com.



About SWIFT

SWIFT is a global member-owned cooperative and the world's leading provider of secure financial messaging services. We provide our community with a platform for messaging, standards for communicating and we offer products and services to facilitate access and integration; identification, analysis and financial crime compliance. Our messaging platform, products and services connect more than 11,000 banking and securities organisations, market infrastructures and corporate customers in more than 200 countries and territories, enabling them to communicate securely and exchange standardised financial messages in a reliable way. As their trusted provider, we facilitate global and local financial flows, support trade and commerce all around the world; we relentlessly pursue operational excellence and continually seek ways to lower costs, reduce risks and eliminate operational inefficiencies.

Headquartered in Belgium, SWIFT's international governance and oversight reinforces the neutral, global character of its cooperative structure. SWIFT's global office network ensures an active presence in all the major financial centres.

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