

Fund Processing Standardisation
Annual Report
on
automation and standardisation of
cross-border funds orders in 2014

26th May 2015

Index

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Background

Since May 2009, EFAMA & SWIFT publish on a regular basis reports on trends in standardisation and automation rates of fund orders received by transfer agents (TAs) in Luxembourg and Ireland.

This latest version of the Fund Processing Standardization publication is the full-year 2014 report. It combines the Luxembourg and Ireland data into one single cross-border fund processing report providing

- a. an aggregated view on both fund processing centres together;
- b. a detailed overview per fund processing centre (Luxembourg and Ireland separately); and
- c. a regional perspective of fund processing STP rates per fund processing centre.

This ongoing initiative has the goal to inform about industry's advancements toward increased automation of fund orders and the use of ISO standards, as recommended by EFAMA¹. The audience are institutions involved in fund processing, as well as the European Commission, the European Parliament and other interested stakeholders.

Besides the reporting of order volumes and automation rates, this report contains an analysis on the regional split of order volumes (by order giver location). The regional figures are provided in each market focus section as they are based on the underlying sub-set of survey respondents in these markets. In addition, the report provides statistics on the automated links newly implemented by the TAs in Luxembourg and Ireland in 2014.

EFAMA and SWIFT publish two Fund Processing Standardisation reports per year, which are available on both company websites.

¹ EFAMA's best practice recommendations are available on both SWIFT and EFAMA's websites. The first set of recommendations were published in February 2005. A new report was published on 24 March 2011, consolidating the recommendations published in 2005 and updated in 2008, and extending the recommendations in two key areas, i.e. Transfers and Corporate Actions.

Report Highlights

A. Automation and standardisation of fund orders in Luxembourg and Ireland

1. **Survey coverage: 29 transfer agents (TAs)** contribute to the survey
 - a. **20 Luxembourg-based TAs**
 - b. **9 Ireland-based TAs**

With an estimated market coverage² of 80% of the cross-border market volumes in Ireland and an estimated market coverage of 75% in Luxembourg.
2. **Total automation rate³** of orders during Q4 2014 reached **82.6%**; this represents an increase of 2.8 percentage points compared to Q4 2013 (**79.8%**).
3. **ISO automation rate⁴** reached **49.4%** in Q4 2014 compared to **44.9%** in Q4 2013, an increase of **4.5** percentage point.
4. In terms of number of new automated links setup by TAs with new order givers, **ISO adoption is clearly the first choice**. Indeed, survey contributors have reported 305 new ISO automated links implemented during 2014, compared to 9 new proprietary file transfer (FTP) links put in place in 2014.
5. The **ISO messaging standard adoption** rate, in line with the EFAMA recommendation in favour of a single ISO standard to be used in the funds industry, continues to strengthen to the detriment mainly of manual orders.
6. The **order volumes** processed by the 29 survey contributors reached **30.6 million orders** in 2014.
7. The **29 surveyed TAs manually processed 6 million orders in 2014**, compared to 5.9 million in 2013. Manual process rates decreased by 2.8 percentage points to 17.4% in Q4 2014 (against 20.2% in Q4 2013).

Fund Orders Automation and Standardisation Progress Overview

GLOBAL OVERVIEW	Q4 2012	Q4 2013	Q4 2014	Change 13 - 14
Manual orders	22.3%	20.2%	17.4%	-2.8%
ISO automated orders	43.8%	44.9%	49.4%	4.5%
Proprietary FTP orders	33.9%	34.9%	33.2%	-1.7%
Total automated	77.7%	79.8%	82.6%	2.8%

Table 1 – Automation and Standardisation rate evolution (Q4 data)

² Figures have been adjusted to reflect missing data from two TAs that were not able to participate in the survey. For Ireland, the impact is negligible as the data represented a small volume, but for Luxembourg the weight ratio is now higher.

We removed the figures retroactively for this TA for 2013, in order to ensure a comparable statistical basis.

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

⁴ The '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').

B. Automation and standardisation of fund orders in Luxembourg

1. **Survey coverage: 20 TAs contributed to the survey in 2014** (8 in-house and 12 third-party TAs).
2. The **total automation rate of orders** processed by Luxembourg TAs reached **81.3%** during Q4 2014, compared to 76.6% in Q4 2013.
3. The **ISO automation rate** remains stable at **57.9%** in Q4 2014. The rate of proprietary FTP increased to 23.4% in Q4 2014 against 18.8% in Q4 2013, while the manual orders decreased to 18.7% in Q4 2014 compared to 23.4% in Q4 2013. This evolution confirms the strong industry commitment towards the implementation of the EFAMA's fund processing recommendation to adopt ISO as the single standard for fund processing.
4. The **ISO automation rate** in the EMEA and APAC regions rose to 69% and 28.2% respectively in Q4 2014 (against 64.5% and 19.7% in Q4 2013). While the ISO automation in Americas decreased to 29.6% in Q4 2014 compared to 33.3% in Q4 2013.
5. The **order volumes** processed by Luxembourg TAs reached **21.1 million** in 2014 compared to 18.6 million in 2013. The number of orders processed manually reached 4.5 million in 2014 compared to 4.4 million in 2013.

Fund Orders Automation and Standardisation Progress Overview- Luxembourg

GLOBAL OVERVIEW	Q4 2012	Q4 2013	Q4 2014	Change 13 - 14
Manual orders	26.3%	23.4%	18.7%	-4.7%
ISO automated orders	56.5%	57.9%	57.9%	0.0%
Proprietary FTP orders	17.2%	18.8%	23.4%	4.7%
Total automated	73.7%	76.6%	81.3%	4.7%

Table 2 – Luxembourg automation and standardisation rate evolution (Q4 data)

C. Automation and standardisation of fund orders in Ireland

1. **Survey coverage: 9 TAs surveyed** (9 third-parties TAs).
2. The **total automation rate** of orders processed by Irish TAs remains stable compared to Q4 2013 and stay at 85.6% in Q4 2014.
3. The percentage of automated orders based on **ISO messaging standards** increased to **29.5%**, in Q4 2014, from 20.9% in Q4 2013. The **rate of proprietary FTP orders** decreased to **56.1%** in Q4 2014 compared to 64.8% in Q4 2013. The manual orders remains at 14.4% in Q4 2014.
4. The **order volumes** processed by Irish TAs reached **9.5 million** in 2014.
5. The **ISO automation rate increased** in EMEA and Americas regions from 7.4% and 5.9% respectively in Q4 2013 to 12.3% and 9.2% in Q4 2014. In APAC, the ISO automation rate decreased to 18.9% (against 21.2% in Q4 2013).

Fund Orders Automation and Standardisation Progress Overview – Ireland

GLOBAL OVERVIEW	Q4 2012	Q4 2013	Q4 2014	Change 13 - 14
Manual orders	14.7%	14.4%	14.4%	0%
ISO automated orders	19.3%	20.9%	29.5%	8.6%
Proprietary FTP orders	66.0%	64.8%	56.1%	-8.7%
Total automated	85.3%	85.6%	85.6%	0%

Table 3 – Ireland Automation and Standardisation rate evolution (Q4 data)

A. Automation and standardisation of fund orders in Ireland and Luxembourg

A.1 Total automation and standardisation rates

Total automation rate

The total automation rate reached 82.6% in Q4 2014, compared to 79.8% in Q4 2013. This increase was accompanied with a decrease in the manual processing rate (from 20.2% to 17.4%), mainly to the benefit of ISO automation.

Total automation rate	Q1	Q2	Q3	Q4
2012	76.5%	77.0%	76.0%	77.7%
2013	78.5%	78.8%	78.6%	79.8%
2014	79.0%	79.3%	80.4%	82.6%

Table 5 – Total automation rate evolution 2012 - 2014 (by quarter)

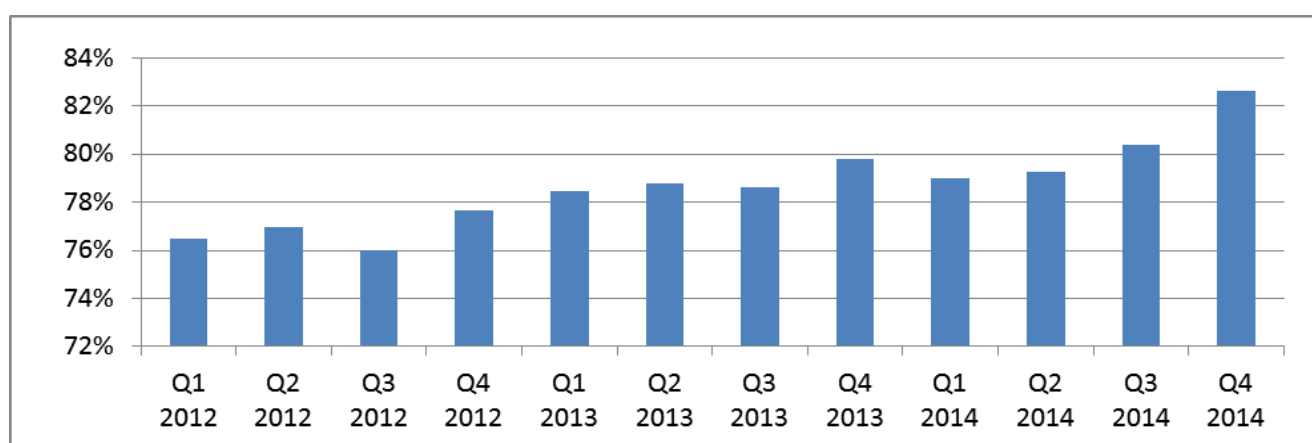


Figure 2 – Total automation level evolution (by quarter)

Total standardisation rate

The use of the ISO messaging standard increased by 4.5 percentage points in the course of 2014 to reach 49.4% in Q4 2014 (against 44.9% in Q4 2013).

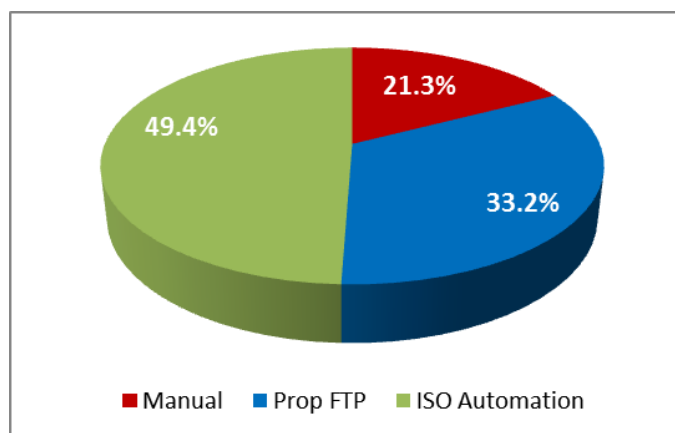


Figure 3 – Total fund order processing rates (Q4 2014)

The graph below shows the various rates evolution since the beginning of 2012.

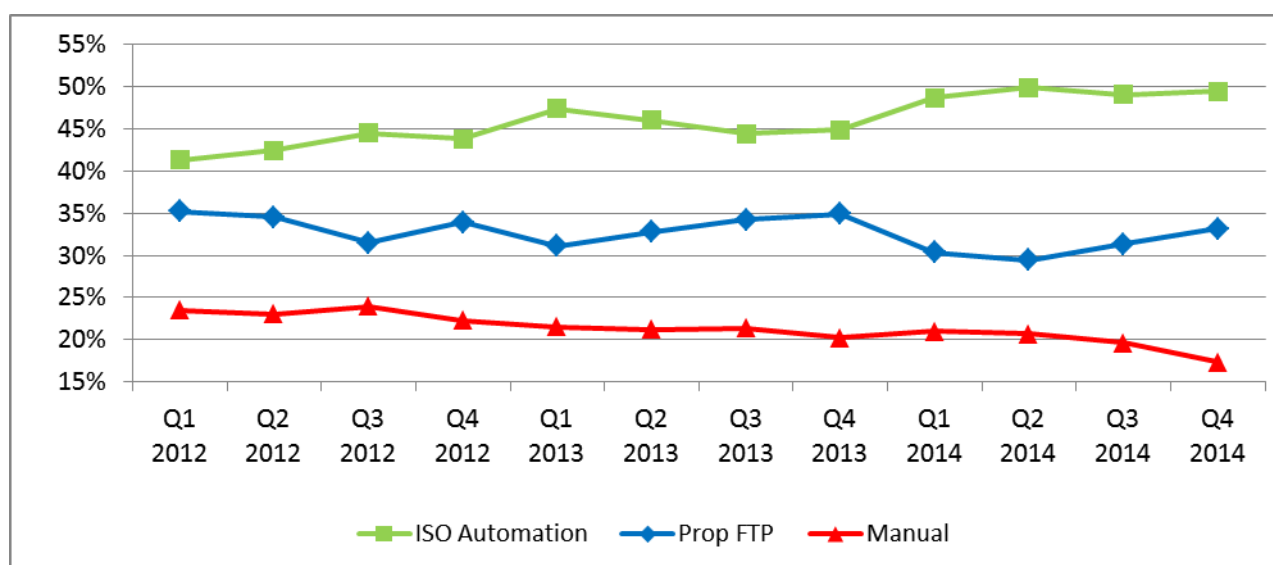


Figure 4 – Total fund order processing rates evolution 2012 - 2014

The adoption of proprietary FTPs decreased by 1.7 percentage point in 2014, whereas the share of manual orders fell from 21.3% in Q4 2013 to 17.4% in Q4 2014. The above trends show a continuous increase of the ISO standards adoption, and a continuous decrease of manual and proprietary FTP orders.⁵

⁵ The reported share of “Total ISO” covers ISO 15022 and ISO 20022 messages. The migration programme from ISO 15022 fund messages into ISO 20022 fund messages is ongoing with the consequence that the ISO 20022 message will become the single ISO open market standard for fund messages, as recommended by EFAMA.

The table below provides detailed rates per quarter.

ISO automation rate	Q1	Q2	Q3	Q4
2012	41.3%	42.4%	44.5%	43.8%
2013	47.4%	46.0%	44.4%	44.9%
2014	48.7%	49.9%	49.0%	49.4%
Proprietary FTP rate	Q1	Q2	Q3	Q4
2012	35.2%	34.5%	31.5%	33.9%
2013	31.1%	32.8%	34.2%	34.9%
2014	30.3%	29.4%	31.3%	33.2%
Manual rate	Q1	Q2	Q3	Q4
2012	23.5%	23.0%	24.0%	22.3%
2013	21.5%	21.2%	21.4%	20.2%
2014	21.0%	20.7%	19.6%	17.4%

Table 6 – Total fund order processing rates evolution 2012- 2014 (by quarter)

Italian Market example

Recent developments in the Italian market highlight the industry's advancements toward increased automation of fund orders and the use of ISO standards.

The Italian market is currently rolling out to ISO20022 communication standards between **asset managers, intermediaries, local TAs and custodian banks**.

The standards implementation currently covers the following areas: **Fund Processing Passport, account opening and modification, order processing, transfer of positions**, Price report and SOH messages.

In each of these areas, recommendations both at general and technical level cover various aspects: not only timing and procedures of order processing, but also standards for business elements and for the language to be used between intermediaries.

This project is composed of 2 phases:

- A pilot phase involving 18 institutions, which has been completed
- A market phase where another 18 institutions will adopt the solutions, and complete the project in Q2 2015. The adoption of these standards is designed to **increase the dynamism and competitiveness** of the network relationships between asset managers and distributors in the Italian market, which is already **improving the efficiency** in the asset management industry.

Data shows that that an impressive number of orders are already being processed electronically in a new standardized model, **ISO20022**: current total ISO volume of orders are about 40% of total market volume and the goal is to reach more than 50% during the summer of 2015.

The market coverage, based on total AUM, of fund houses participating in the ISO project is more than 85% (including domestic and cross border funds distributed in Italy). This level of participation was made possible by a strong endorsement from the supervisory entity (Consob and the Bank of Italy), industry organisations, such as Abi and Assogestioni which are promoting and coordinating the initiative, and the technical support organised by the industry organization and outsourced to a technical supplier, Abilab.

A.2 Number of new automated links set up in 2014

To better understand the automation trend, an additional survey was carried out in 2014 among 31 TAs to look at the number of **new automated links implemented** between January and December 2014 with new counterparties.

The surveyed TAs implemented new ISO links with 305 counterparties, compared to 9 new links using a proprietary FTP. Out of these new ISO links, 228 counterparties were previously using fax (representing 70% of all new links) and 44 used proprietary FTP files (14%). Brand new ISO links have been set up with the 33 (10%) remaining counterparties in 2014.

This result confirms that ISO standards remain widely favoured in the market as the most efficient automation option.

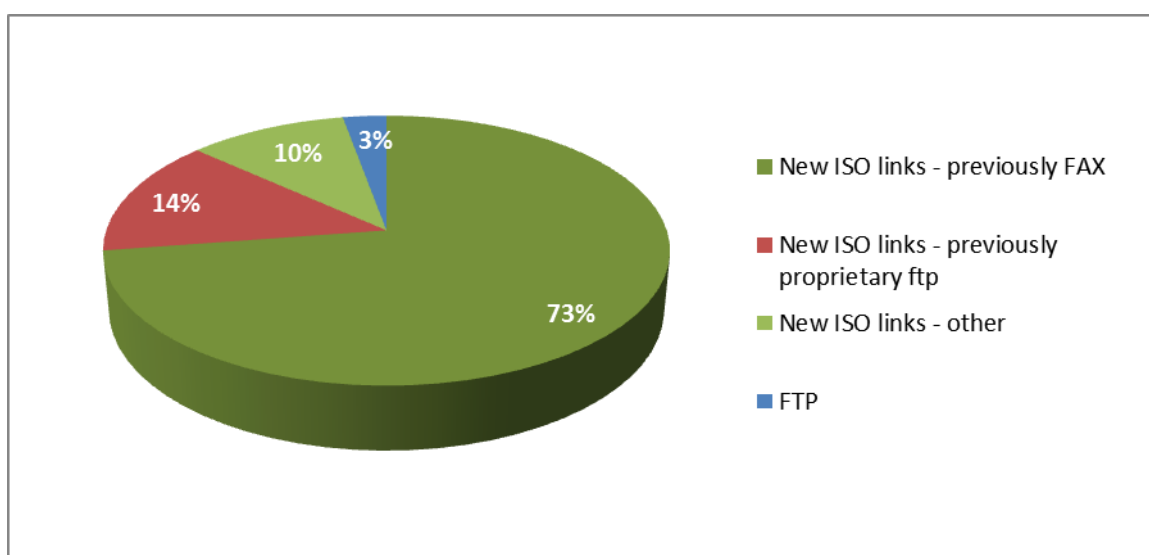


Figure 5 - New automated links launches (2014)

The new ISO adopters on the distribution side are mainly located in the APAC region in Taiwan. In EMEA, new connections came primarily from United Kingdom, Luxembourg, Switzerland, Spain, Germany, Italy, France and Austria but some were also set up in Sweden, Belgium, Ireland, Greece, Poland.

B. Automation and Standardisation of Fund Orders in Luxembourg

B.1 Luxembourg automation and standardisation rates

Luxembourg automation rate

The total automation rate reached 81.3% in Q4 2014, compared to 76.6% in Q4 2013.

Total automation rate	Q1	Q2	Q3	Q4
2011	70.8%	70.1%	69.2%	70.9%
2012	72.5%	73.1%	72.8%	73.7%
2013	76.3%	76.2%	76.1%	76.6%
2014	76.9%	77.5%	78.0%	81.3%

Table 8 – Luxembourg total automation rate evolution 2011- 2014 (by quarter)

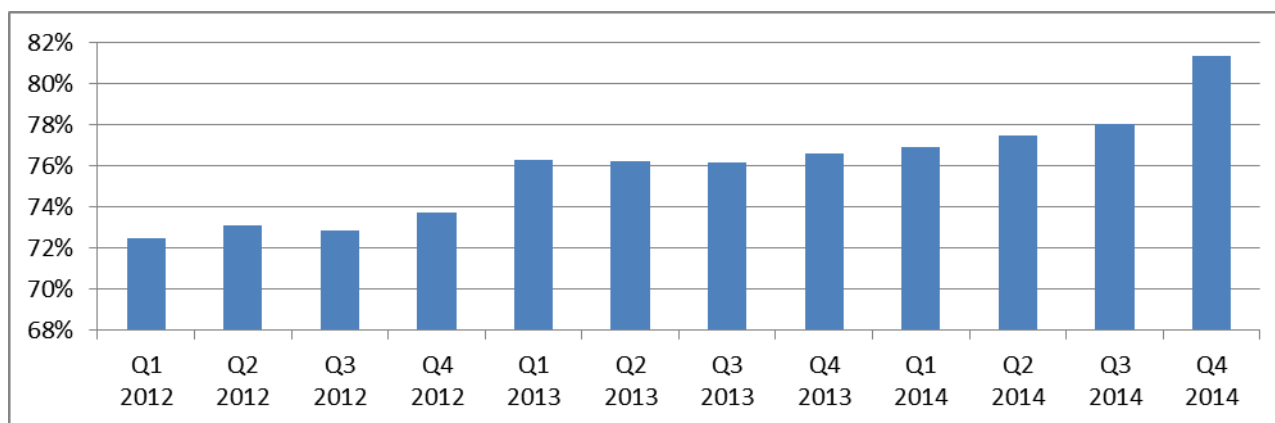


Figure 7 – Luxembourg automation level evolution 2012 - 2014 (by quarter)

Luxembourg standardisation rate

The use of ISO remains stable at 57.9% in Q4 2014 compared to Q4 2013, and the adoption of proprietary formats increased by 4.7 percentage points in Q4 2014. The share of manual orders decreased from 23.4% in Q4 2013 to 18.7% in Q4 2014.

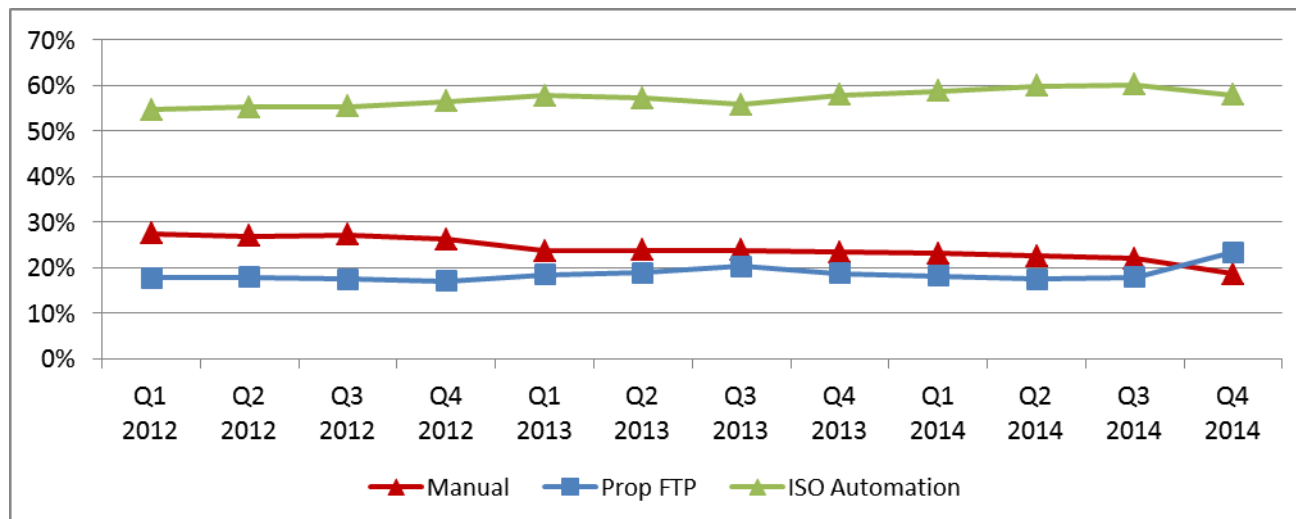


Figure 8 - Luxembourg fund order processing rates evolution 2012 – 2014

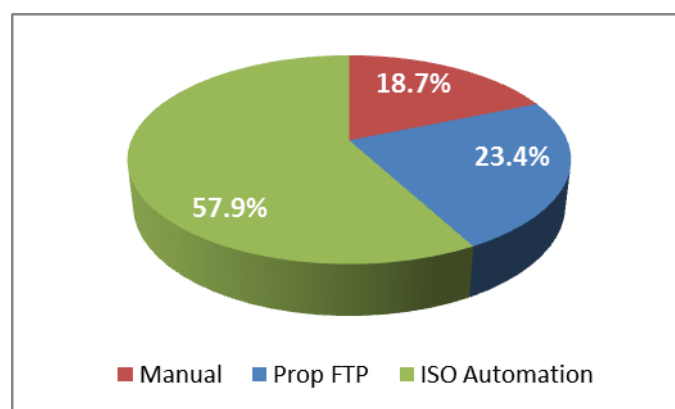


Figure 9 - Luxembourg fund order processing rates 2014 (Q4 2014)

The table below provides detailed rates per quarter.

ISO automation rate	Q1	Q2	Q3	Q4
2011	51.6%	51.4%	50.3%	51.6%
2012	54.6%	55.2%	55.4%	56.5%
2013	57.7%	57.3%	55.8%	57.9%
2014	58.7%	59.9%	60.1%	57.9%
Proprietary FTP rate	Q1	Q2	Q3	Q4
2011	19.2%	18.7%	19.0%	19.3%
2012	17.8%	17.9%	17.5%	17.2%
2013	18.5%	19.0%	20.3%	18.8%
2014	18.2%	17.5%	17.9%	23.4%
Manual rate	Q1	Q2	Q3	Q4
2011	29.2%	29.9%	30.8%	29.1%
2012	27.5%	26.9%	27.2%	26.3%
2013	23.7%	23.8%	23.9%	23.4%
2014	23.1%	22.5%	22.0%	18.7%

Table 9 – Luxembourg fund order processing rates evolution 2011- 2014 (by quarter)⁶

⁶ The median for the Luxembourg total automation rate and the ISO automation rate evolved to respectively 77% and 57% compared to the previous year where it stood at 74% and 51%. The manual median rate decreased to 23% (compared to 26% last year). The median is the numeric value separating the higher half of a sample, from the lower half. The median has been calculated on 2014 volumes.

B.2 Regional overview

Regional breakdown information is available from a subset of the Luxembourg survey contributors (13 out of 20) representing 12.2 million orders in 2014 or 58% of the volumes. The regional percentages are calculated on this subset.

Regional split of volumes by order giver location

APAC-based order givers generated 29% of incoming order volumes in Luxembourg during Q4 2014. The percentage of orders from order givers in EMEA was 67% against 4% from Americas-based order senders.

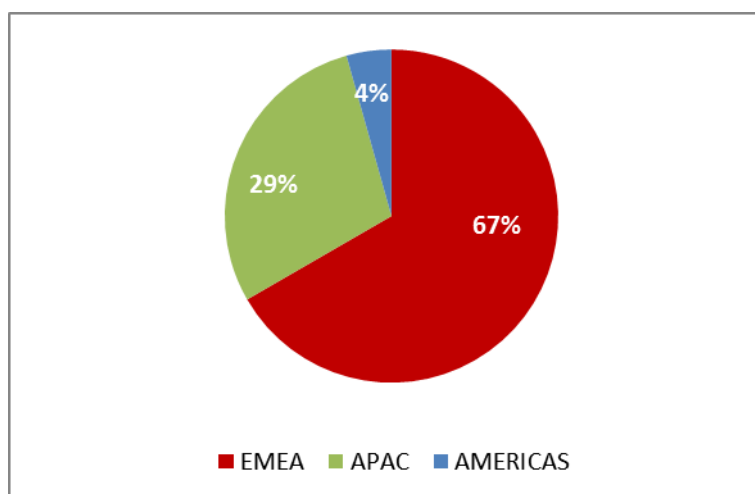


Figure 10 - Luxembourg order volumes per region (by order giver location –Q4 2014)

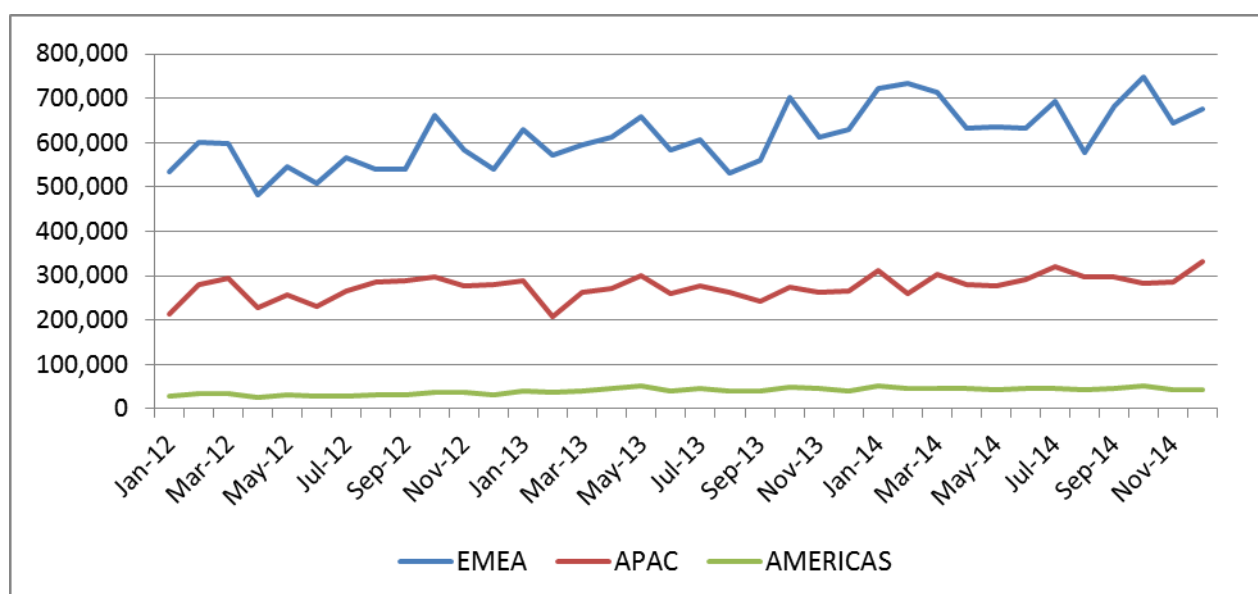


Figure 11 - Luxembourg order volumes evolution per region

Regional split of automation and standardisation rates

ISO automation rates of APAC-based order giver increased steadily from 19.7% in Q4 2013 to 28.2% in Q4 2014. In EMEA, the ISO adoption rate has increased by 4.5 percentage points. While in Americas, the rate has decreased by 3.7 percentage points.

The total automation (ISO + proprietary) rate increased in EMEA and APAC regions with a strong growth for APAC from 57.6% in Q4 2013 to 64.6% in Q4 2014. While in the Americas, total automation rate decreased from 77% in Q4 2013 to 74.9% in Q4 2014.

	ISO automation			Total automation (ISO+proprietary formats)		
	EMEA	APAC	Americas	EMEA	APAC	Americas
Q4 2011	61.7%	12.8%	34.1%	76.6%	34.6%	71.0%
Q4 2012	66.4%	14%	30.6%	80.9%	43.4%	74.0%
Q4 2013	64.5%	19.7%	33.3%	80.4%	57.6%	77.0%
Q4 2014	69.0%	28.2%	29.6%	83.3%	64.6%	74.9%

Table 10 – Luxembourg fund order automation rates evolution by region

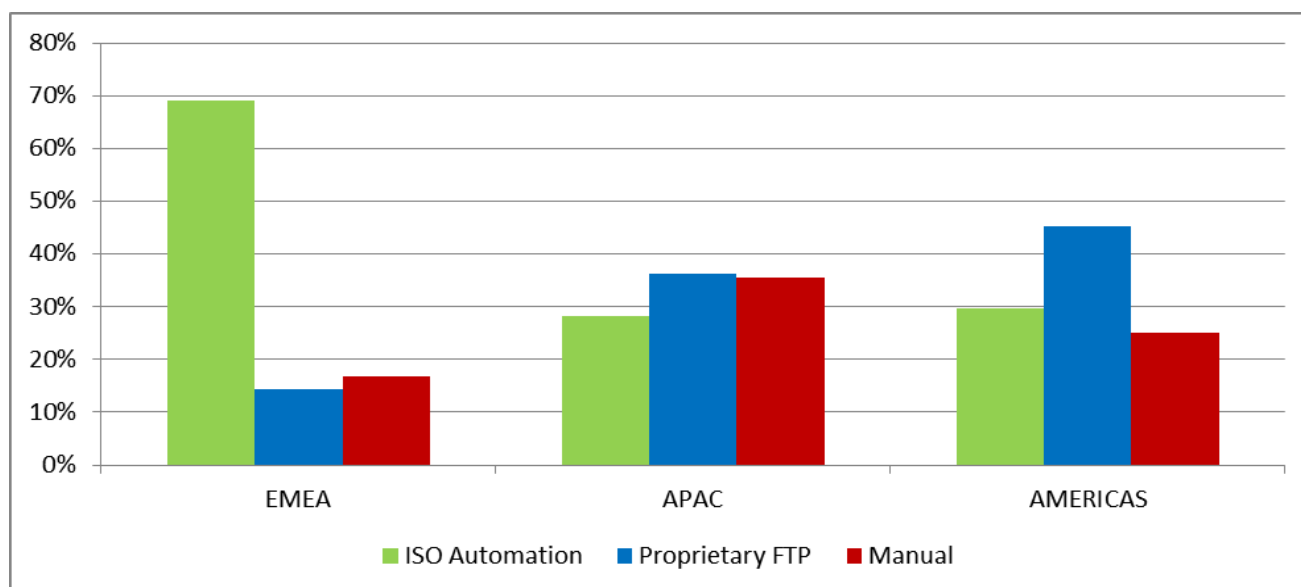


Figure 12 – Luxembourg fund order processing rates per region (Q4 2014)

C. Automation and Standardization of Fund Orders in Ireland

C.1 Ireland automation and standardisation rates

Ireland automation rate

The total automation rate remains stable at 85.6% in Q4 2014.

Total automation rate	Q1	Q2	Q3	Q4
2012	84.4%	84.6%	82.8%	85.3%
2013	83.1%	83.9%	83.4%	85.6%
2014	83.8%	83.3%	85.1%	85.6%

Table 12 - Ireland automation rate evolution 2012 - 2014 (by quarter)

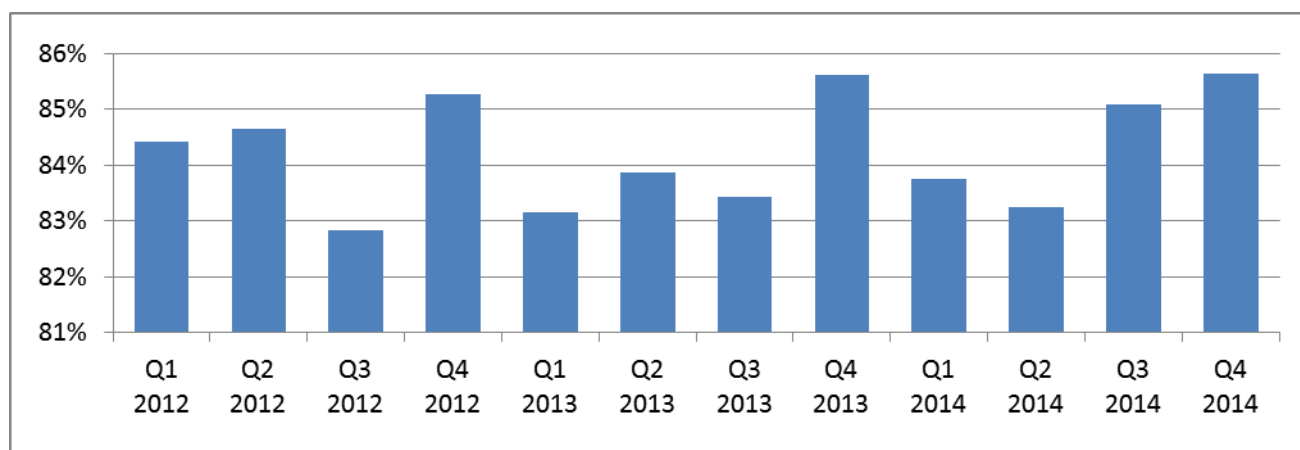


Figure 14 – Ireland automation rate evolution 2012 – 2014 (by quarter)

Ireland standardisation rate

The ISO adoption rate reached 29.5% during Q4 2014, compared to 20.9% during Q4 2013, whereas the adoption of proprietary formats fell from 64.8% to 56.1% during the same period. The share of manual orders remains stable at 14.4% in Q4 2014.

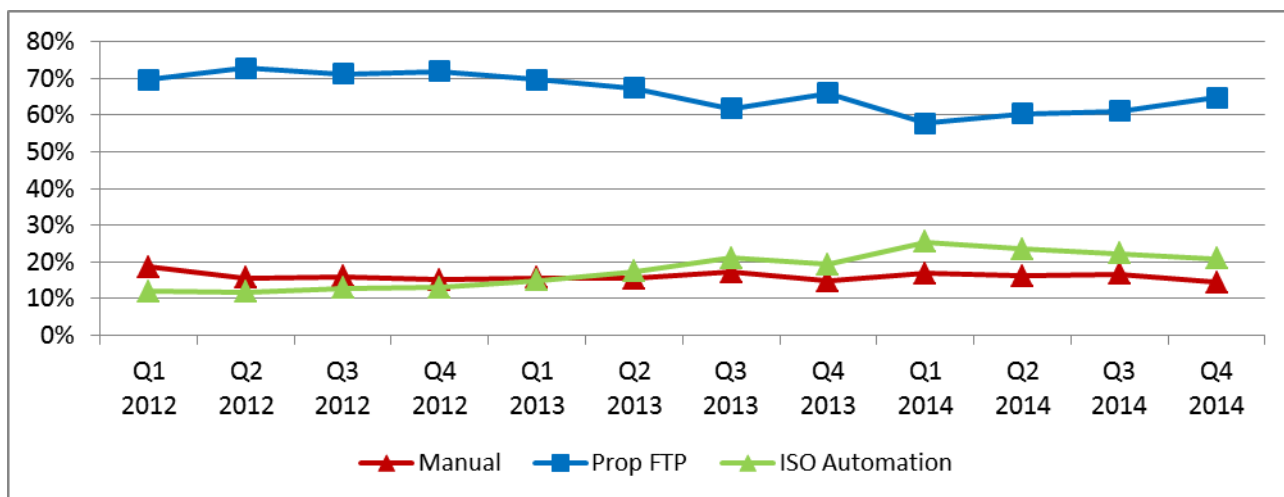


Figure 15 – Ireland standardisation rate 2012 – 2014

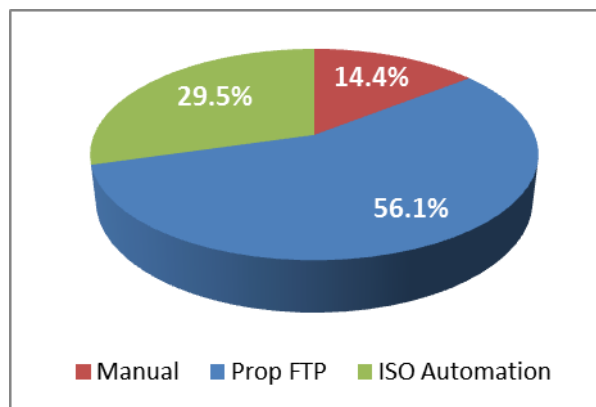


Figure 16 – Ireland fund order processing rates 2014 (Q4 2014)

The table below provides detailed rates per quarter.

ISO automation rate	Q1	Q2	Q3	Q4
2012	14.8%	17.3%	21.0%	19.3%
2013	25.3%	23.5%	22.3%	20.9%
2014	26%	27.5%	26.7%	29.5%
Proprietary FTP rate	Q1	Q2	Q3	Q4
2012	69.6%	67.3%	61.8%	66.0%
2013	57.8%	60.4%	61.2%	64.8%
2014	57.8%	55.7%	58.4%	56.1%
Manual rate	Q1	Q2	Q3	Q4
2012	15.6%	15.4%	17.2%	14.7%
2013	16.9%	16.1%	16.6%	14.4%
2014	16.2%	16.7%	14.9%	14.4%

Table 13 – Ireland fund order processing rates evolution 2012 - 2014 (by quarter)⁷

⁷ The median for Ireland total automation rate and the ISO automation rate evolved to respectively 70% and 46% compared to the previous year were it stood at 64% and 37%. The manual rate median decreased to 30% compared to last year (36%).

C.2 Regional split of automation and standardisation rates

Regional breakdown information is available from a subset of the Irish survey contributors (5 out of 9) representing 5.9 million orders or 62% of the volumes in 2014. The regional percentages given here under are calculated on this subset.

ISO automation rates of APAC decreased to 18.9% in Q4 2014, whereas, in EMEA and Americas, the ISO automation rate respectively rose to 12.3% and 9.2%.

The total automation rate (ISO + proprietary) slightly decreased in the 3 regions.

	ISO automation			Total automation (ISO+proprietary formats)		
	EMEA	APAC	Americas	EMEA	APAC	Americas
Q4 2011	6.4%	12.9%	11.9%	96.8%	47.4%	91.6%
Q4 2012	10.6%	9.7%	7.8%	96.1%	35.3%	83.3%
Q4 2013	7.4%	21.2%	5.9%	96.3%	71.5%	80.3%
Q4 2014	12.3%	18.9%	9.2%	95.6%	69.2%	80.2%

Table 14 – Ireland fund automation rates evolution by region

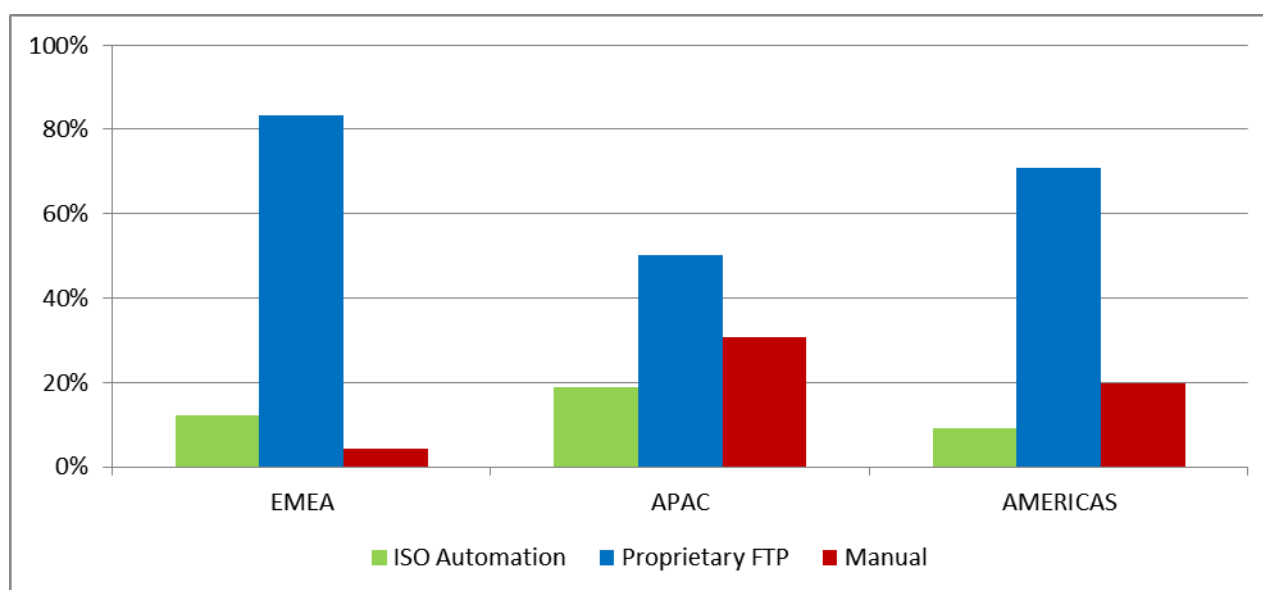


Figure 17 – Ireland fund order processing rates per region (Q4 2014)

D. Next report

The next joint EFAMA-SWIFT Fund Processing Standardisation report is planned for publication in Q4 2015 and will cover the development during the first half of 2015.
