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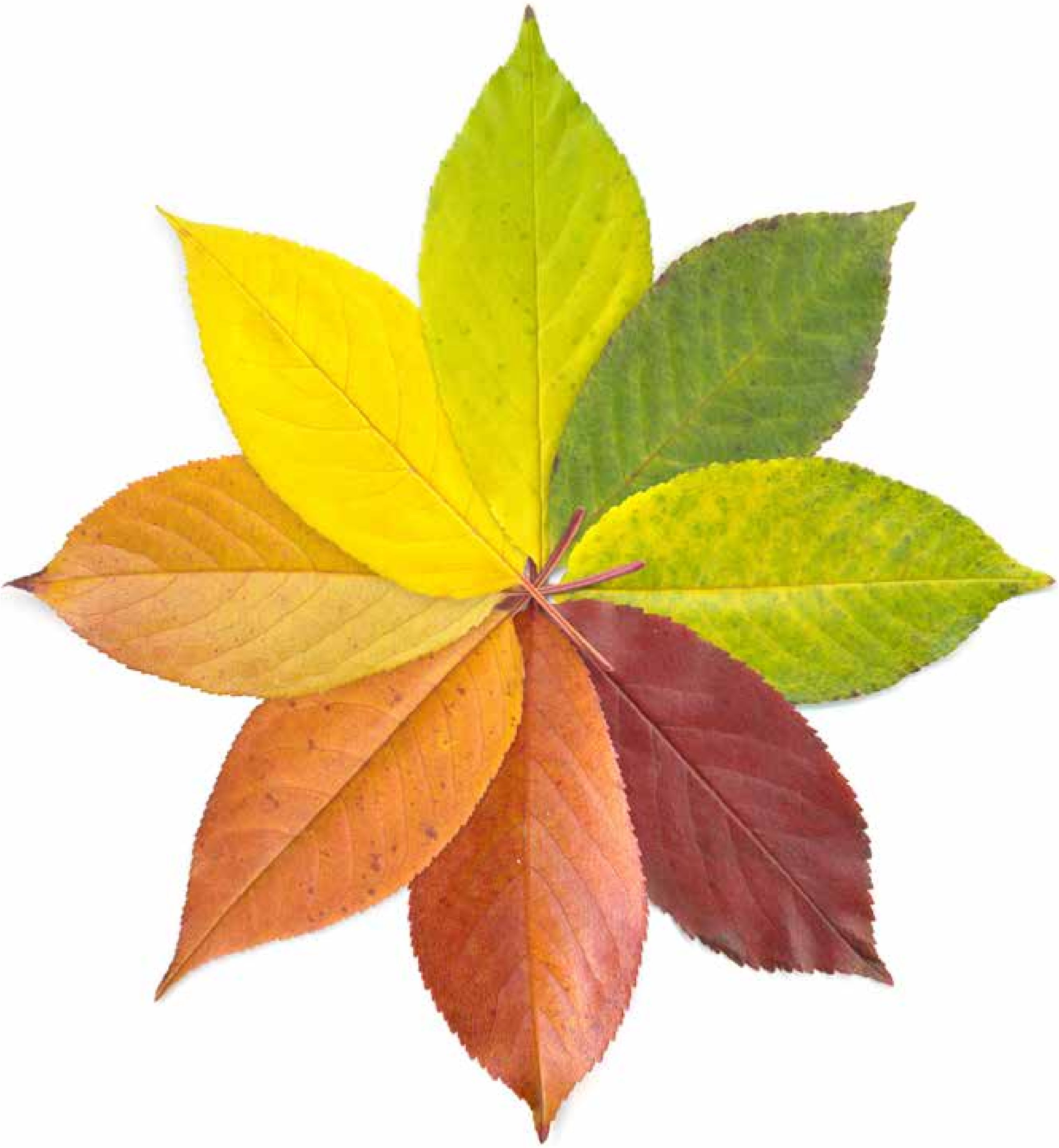

Outlook and future of a sector in remodeling

Professionals of the Financial Sector (PSF) in Luxembourg

December 2019

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Foreword

The Luxembourg financial centre reasserts its leading role in the global financial sector each year. The country's reputation for its quality services among clients coming to Luxembourg is built on the **expertise and know-how of its Professionals of the Financial Sector (PSF).**

The Professionals of the Financial Sector industry (PSF) in Luxembourg numbered 280 entities at year-end 2018, compared to 289 a year earlier. In terms of jobs, the sector has employed more than 15,000 people over the past years and this number has continuously increased to represent more than 17,000 in June 2019. **The PSF market displays definite robustness**, with an **increase in employment**, despite the slight decrease in the number of entities in recent years.

Competitiveness is inherent in all markets. In a regulatory and technological environment that is constantly evolving, not to say undergoing revolution, it is important that PSF focus on their core business and adapt to the needs and changes of tomorrow. We are observing an **ongoing remodeling** of some organizations' licenses, reflecting a better understanding of licensing requirements according to the services provided and, in some areas, a quest for synergy resulting particularly in a concentration of players and a new range of service offerings. Through our detailed analysis of the PSF market, we present **the key trends and changes in this industry in an ever-changing environment.**

Integrating the latest PSF figures plus explanations, our report analyses changes in PSF and demonstrates their dynamic nature. It features **interviews with key people** from the financial centre and articles on topical issues, written by industry-dedicated professionals.

The report provides an overview of PSF and illustrates the existing types and their developments. It confirms the industry's importance in the Luxembourg economy.

Following the numerous and **significant regulatory developments that have occurred in the past years**, players in the industry have had to (and continue to) familiarize themselves with all these topics, and make the necessary adjustments to comply with the new requirements and in some areas have to reimagine their service offer and their business delivery model.

We kindly thank **Christian Heinen**, **Patrick Kemper** and **Gael Minon** for their valuable contributions to this brochure. Their complementary experience in this industry has provided us with an enlightened opinion of the latest PSF news and the sector's prospects.

We hope you will enjoy reading our publication.

Raphaël Charlier
Partner – PSF Leader

Adil Sebbar
Director – Audit

Introduction

PSF: A wide range of services in a regulated environment

Professionals of the Financial Sector (PSF) are defined as regulated **entities offering financial services apart from the receipt of deposits from the public** (a function that is strictly confined to credit institutions).
This industry therefore covers a wide range of financial and even non-financial services.

PSF, which are supervised by the Luxembourg regulatory authority, the Commission de Surveillance du Secteur Financier (CSSF), enjoy special access to the market in financial activities and fall within the financial sector's specific sphere of information confidentiality and security.

The professional secrecy obligation is defined by Article 41 of the Law of 5 April 1993, as amended by the law of 27 February 2018. This obligation was reinforced by the entry into force of the new General Data Protection Regulation (EU) 2016/679 on 25 May 2018.

This special access is not without consequences in terms of governance, structure, risk management and prudential supervision. It is governed by the Law of 5 April 1993, as amended, relating to the financial sector ('The Law').

By virtue of the demands of information confidentiality and security, many non-financial actors have made the necessary efforts, and often on a large scale, to obtain PSF status allowing them to serve other players of the financial sector.

There are four types of PSF depending on the type of activity carried out and the nature of the services provided, namely:

- **Investment firms** (Art. 24 to 24-10 of the Law) are defined as firms supplying or providing investment services to third parties on a professional and ongoing basis. These are mainly:
  1. Investment advisers
  2. Brokers in financial instruments
  3. Commission agents
  4. Private portfolio managers

Professionals of the Financial Sector (PSF) are defined as regulated entities offering financial services apart from the receipt of deposits from the public.

- **Specialized PSF** (Art. 25 to 28-11 of the Law), renamed as such by the Law of 28 April 2011, these are entities active in the financial sector but which do not offer investment services. They mainly include:
  1. Corporate domiciliation agents
  2. Registrar agents
  3. Family Offices
- **Support PSF** (Art. 29-1 to 29-6 of the Law) act principally as subcontractors offering operational services on behalf of credit institutions, PSF, payment institutions, electronic money institutions, insurance and re-insurance undertakings, pension funds and UCIs. They also act on behalf of Specialized Investment Funds (SIF), SICAR (Société d'Investissement en Capital à Risque or venture capital companies), approved securitization entities and RAIF (reserved alternative investment funds). They include:
  1. Support PSF not involved in information technology, namely client communication agents (Art. 29-1) and financial sector administrative agents (Art. 29-2).
  2. Support PSF involved in information technology, namely Primary IT Systems Operators of the financial sector (OSIP - Art. 29-3) and Secondary IT Systems and communication networks operators of the financial sector (OSIS - Art. 29-4).
  3. Support PSF offering dematerialization or digital document conservation services (Art. 29-5 and 29-6).
- (Art. 29-7 to 29-14) introduced by the law of 30 May 2018 are entities carrying out at least one of the following activities:
  - Approved Publication Arrangements (APA) – Art. 29-12
  - Consolidated Tape Providers (CTP) – Art.29-13
  - Approved Reporting Mechanisms (ARM) – Art.29-14

  There are only three entities that have obtained the licenses listed above:
  - Deloitte Solutions S.à r.l.
  - KPMG Services S.à r.l.
  - LAB Luxembourg S.A.

This report presents **the scope** of this industry in Luxembourg and gives a clear view of the **different types** of PSF and how they have **evolved**.

Deloitte has for many years been developing the expertise necessary to enable it to support and advise all forms of PSF during their development stages from the time of creation and throughout their growth period. These services are described in the appendix to this brochure.

1

Scope of PSF in the Luxembourg economy

1.1 A strong economic player

Analysis of the importance of PSF and review of their economic and social impacts.

Market size

The number of PSF has become slightly consolidated. The Grand Duchy identified 280 PSF as at 31 December 2018, down from 289 at the end of 2017.

The main category of PSF in 2018 remains specialized PSF, which accounts for 39%. The downturn in the number of these PSF (-12% between 2013 and 2018) seems to have stabilized in 2018.

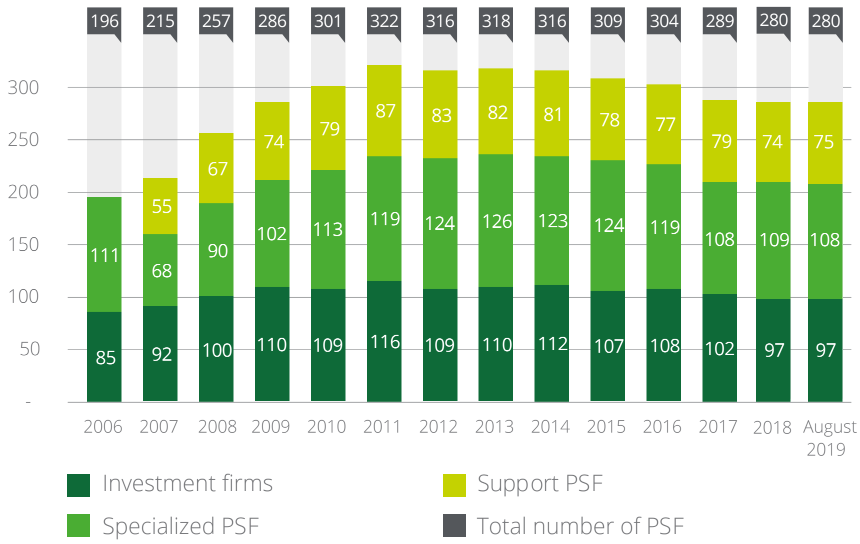
In 2018, investment firms accounted for 35% of PSF. In the majority until 2009, their progress has stabilized between 2009 and 2017. We are continuing to see a stabilization in the number of PSF, with 280 entities in December 2018 and in August 2019.

This market trend for the PSF industry can be broken down into three phases:

- From 2006 to 2011, the number of PSF created increased by 64%, mainly due to the growth of the financial centre, particularly in investment funds and corporate domiciliation agents, and to the growing number of financial and non-financial services in demand from Luxembourg financial institutions (banks, insurance companies, funds, etc.)
- From 2012 to 2016, the number of PSF stabilized, a trend that was mainly due to a better understanding of licensing requirements according to the services provided.
- Since 2017, the number of PSF has seen a reasonable level of stability, from 289 in December 2017 to 280 in December 2018. This reduction stems primarily from the growing costs that PSF must incur to comply with new regulations (MiFID II & GDPR) and to keep up with digitalization. It is also due to an increase in the number of merger transactions concluded with the aim of pooling resources to reduce costs and attain the critical size. 2017 and 2018 were 2 years of consolidation for investment firms' footprint.

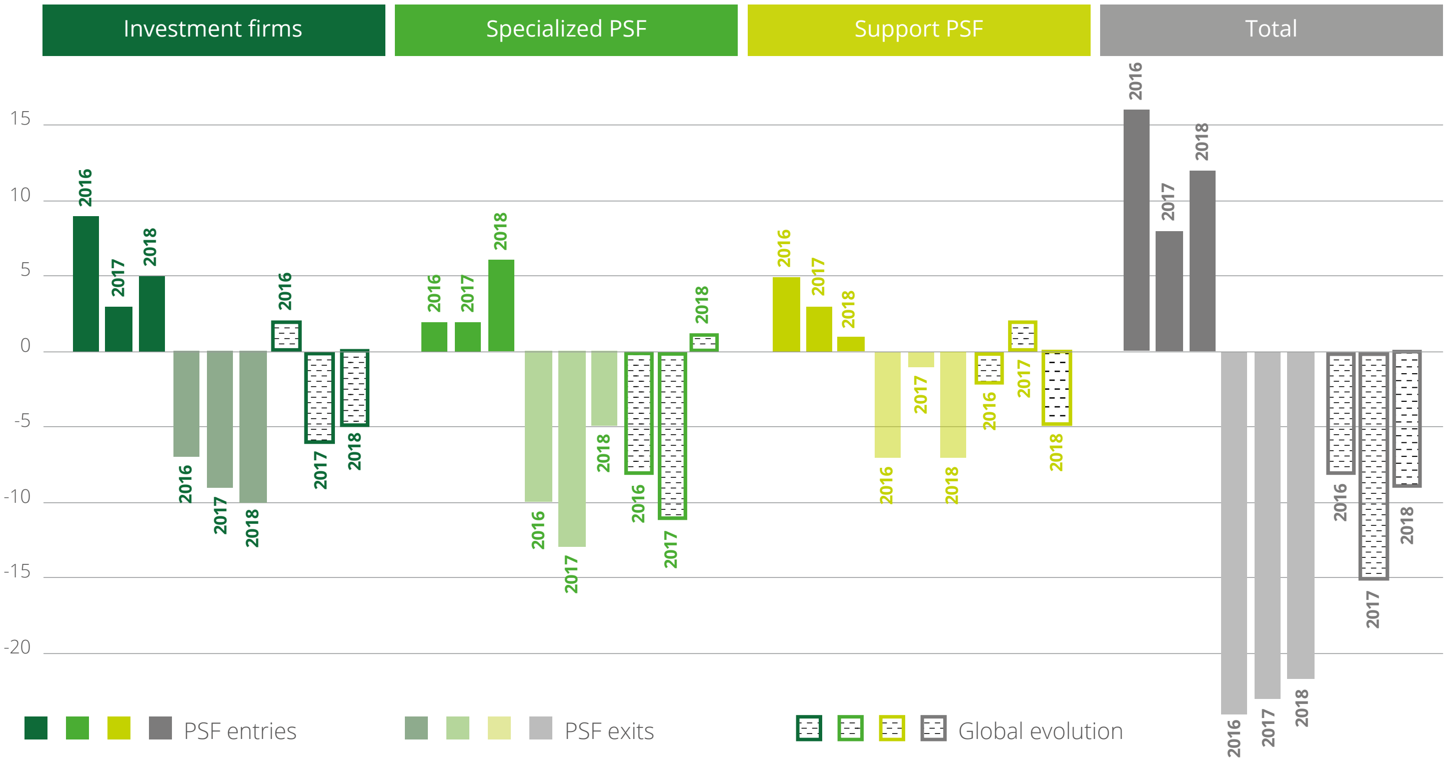
It should be noted that the minor dip in the number of PSF has slightly affected the net profit (decreasing from € 576 million in 2017 to € 545 million in 2018) but has not affected either the total balance sheet amount (which increased from € 8.377 million end of 2017 to € 8.965 million end of 2018) or the number of employees (which grew from 15,935 end of 2017 to 16,526 end of 2018.

Figure 1: Annual change in the number of PSF by category



Source: CSSF list of PSF as at 31 December 2018

Figure 2: PSF change by category - entries and exits 2018, 2017 and 2016



Source: CSSF list of PSF as at 31 December 2018

Changes within each PSF category

The number of PSF varied mainly in the support PSF and investment firm categories between December 2017 and December 2018, with the number of mergers and ending of activities being roughly equal to twice the number of creation of new PSFs for these two categories.

The new PSF result from the creation of companies, but also from the conversion of existing entities into PSF. The variation in PSF numbers may also be due to a change of PSF category.

PSF withdrawals are mainly due to entities relinquishing their PSF status, liquidations and mergers between various PSF.

Some entities refocused their activity and adapted their status accordingly.

We note that, for investment firms, in 2018 there were fewer PSF creations than withdrawals. A similar situation occurred for Support PSF, as there were only two new support PSF in 2018. However, for specialized PSF, the trend reversed in 2018 with a net creation of one entity (6 new Specialized PSF licenses granted in 2018 against 5 withdrawals). The final impact is a slight drop in the number of players in 2018, with a total decrease of 3% in the total number of PSF.

Excerpt from our whitepaper "Luxembourg - from recovery to opportunity, A 10-year retrospective" from July 2017

- The Luxembourg financial sector remains the key strength and contributor of the Luxembourg economy with 27 percent of value produced.
- Financial sector employment has grown by approximately 7,500 jobs since 2007, to reach a total of 46,000 full time employees in 2016, equivalent to nine percent of total Luxembourg employment growth in the period.

- The Luxembourg financial sector has rebounded since the financial crisis, at a faster rate than that of other European countries, with growth of nearly ten times that of the European financial sector.

- In wealth management, in spite of client outflows due to repatriation following increased tax transparency, assets under management in Luxembourg grew from €270 billion to over €350 billion in 2015..

- The international political context has become less predictable, highlighting the relevance of Luxembourg's stability. This aspect has played an increasingly important role in recent years.

PSF Balance sheets and net aggregate results

The sum of the balance sheets of all PSF amounted to €9 billion for 2018, compared to €8 billion as at 31 December 2017, i.e. an increase of 7% in one year.

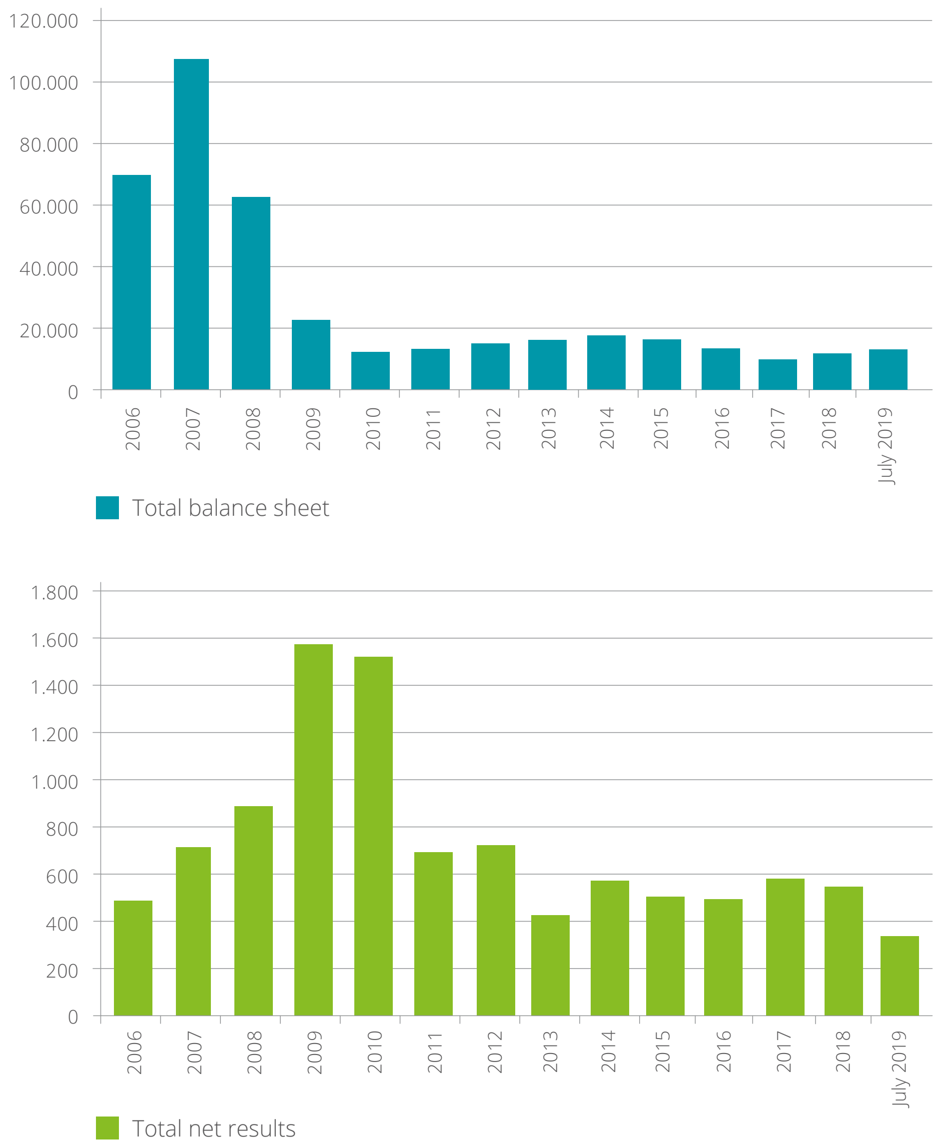
This change is partly due to investment firms that saw their balance sheet total drop by 56%, or approximately € 1.1 billion. This fall is mainly attributable to three investment firms with a very high balance sheet total (NOBIS Asset Management S.A., Fund Channel S.A., Attrax S.A.). However, the total balance sheet of specialized PSF increased by 30%, or €1.6 billion. This variation is mainly attributable to three entities with a very high balance sheet total (Danieli Finance Solutions S.A., UBS Fund Services (Luxembourg) S.A. and Northstar Europe S.A.). Meanwhile, the balance sheet total of support PSF has remained relatively stable in 2018 at €1.3 billion as compared to €1,2 billion in 2017.

The balance sheet concentration of PSF remained stable between December 2017 and December 2018. The three PSF with the largest balance sheet totals (three specialized PSF with a combined BS value of € 2.841 million) account for 32% of the balance sheet total of all PSF, compared to 34% in 2017.

Given the diverse range of players that the term PSF encompasses, we prefer to use net profit as the criterion, rather than balance sheet, as we believe it better reflects the strength and reality of the industry. Thus, PSF posted a 5% decrease in net profits between 2017 and 2018, from €576 million as at 31 December 2017 to €545 million as at 31 December 2018.

According to CSSF data as at 31 July 2019, PSF overall have a provisional net profit of €352 million (specialized PSF accounting for €241 million), a rather positive trend that we hope to see confirmed over the second half of the year.

Figure 3: Evolution of total balance sheets and net results of PSF (in € million)



Source: Statistics of the CSSF

Figure 4: Breakdown of balance sheet totals and net results totals by PSF category

Total balance sheet (in € million)

	2016		2017		2018		July 2019	
	Amount	Relative share	Amount	Relative share	Amount	Relative share	Amount	Relative share
Investment firms	3.164	29%	1.973	24%	875	10%	1.412	13%
Specialized PSF	6.679	61%	5.170	62%	6.746	75%	7.566	68%
Support PSF	1.128	10%	1.234	15%	1.344	15%	2.071	19%
Total	**10.971**	**100%**	**8.378**	**100%**	**8.965**	**100%**	**11.049**	**100%**

Total net results (in € million)

	2016		2017		2018		July 2019	
	Amount	Relative share	Amount	Relative share	Amount	Relative share	Amount	Relative share
Investment firms	132	26%	138	24%	70	13%	68	19%
Specialized PSF	315	61%	358	62%	391	72%	241	69%
Support PSF	67	13%	80	14%	83	15%	43	12%
Total	**514**	**100%**	**576**	**100%**	**544**	**100%**	**352**	**100%**

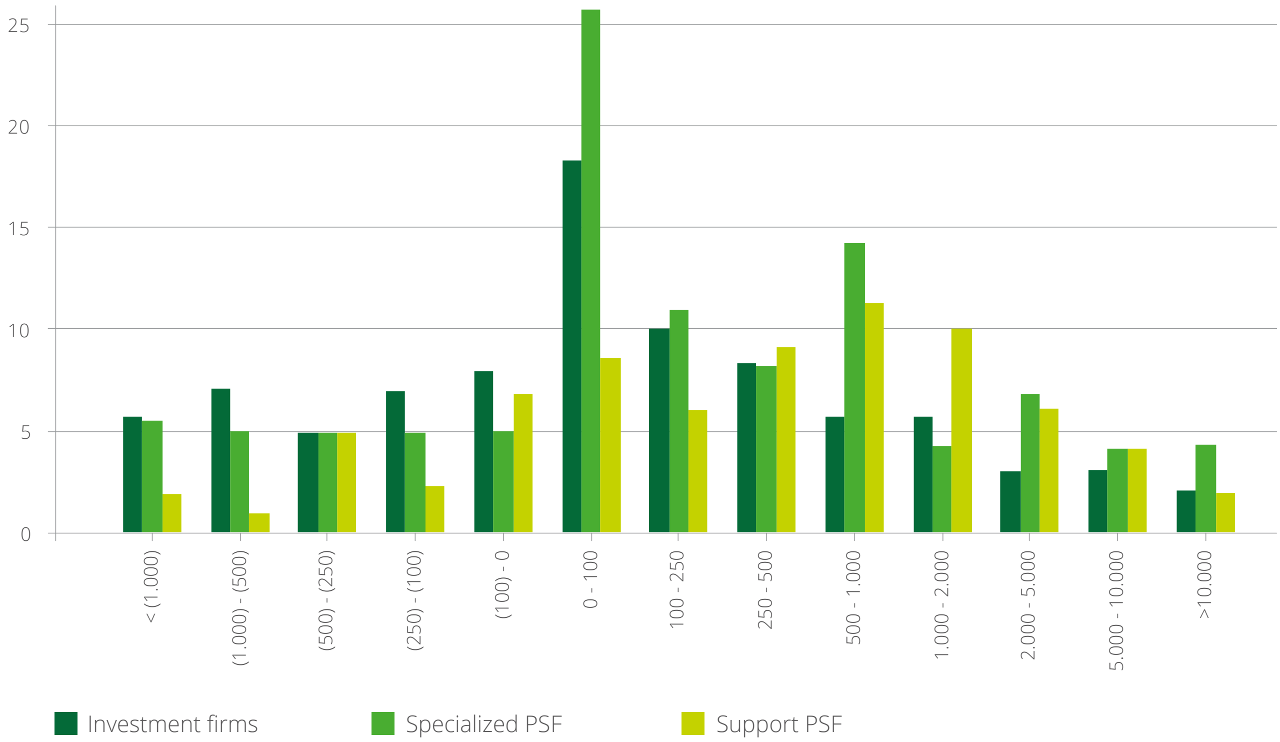
Source: CSSF statistics at July 2019

An analysis of profits by category shows that:

- The net profits of **investment firms**, which decreased by over 49% over 2018, saw their relative share drop (13% in 2018 compared to 24% in 2017).
- The profits of **specialized PSF** increased considerably in 2018, with an 9% rise. In 2018, specialized PSF accounted for 72% of the profits of all PSF (62% in 2017).
- The profits of **support PSF** slightly increased by 4%. Their relative share remained stable with 14% in 2017 compared to 15% in 2018.

Figure 5.1: Breakdown of PSF by net profit bracket as at 31 December 2018 (in € thousands)

Following our analysis of the financial statements that we received, the structure of the main profit trends is as follows:



The average net profit of a PSF as at 31 December 2018 remains stable as compared to 2017, and it amounts to €2 million.

Figure 5.2: Comparison of breakdown of PSF by net result bracket in 2017 and in 2018 (in € thousands)

	Investment firms		**Specialized PSF**		**Support PSF**	
	2017	2018	2017	2018	2017	2018
Loss	27%	37%	26%	25%	18%	23%
Proft between 0 & 100	17%	20%	22%	25%	12%	11%
Profit between 100 & 1,000	37%	27%	30%	32%	45%	36%
profit between 1,000 & 5,000	14%	10%	11%	10%	20%	22%
Profit > 5,000	5%	6%	11%	8%	5%	8%
	100%	**100%**	**100%**	**100%**	**100%**	**100%**

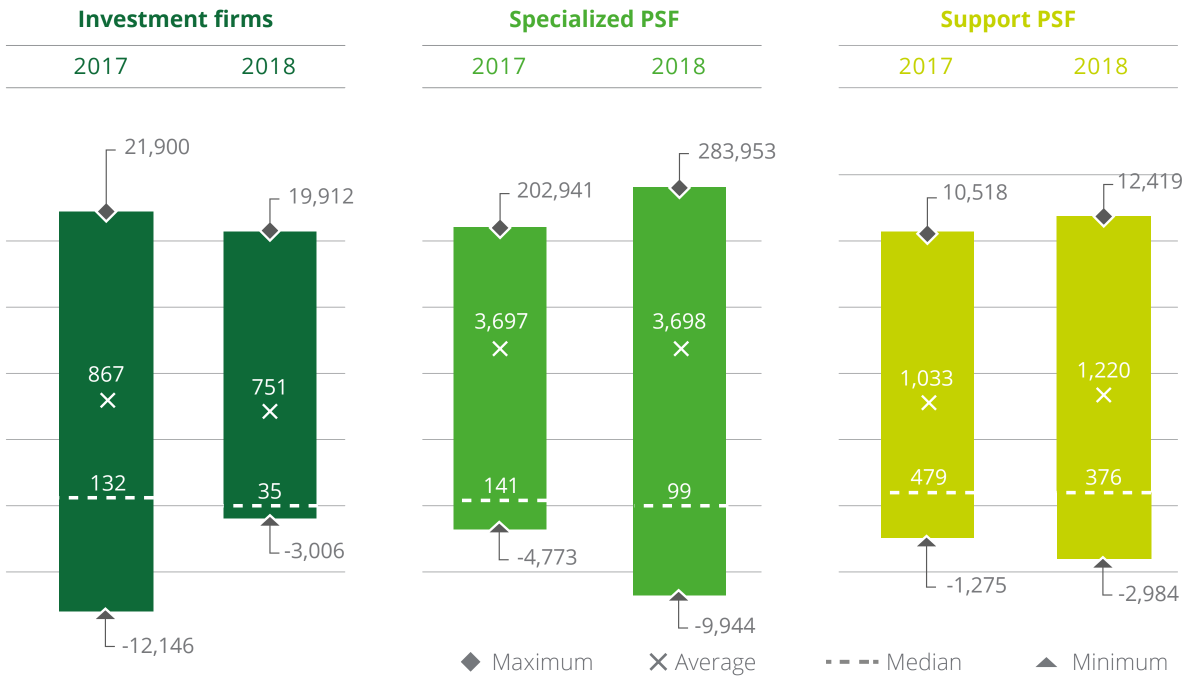
Investment firms category:
Net results of investment firms ranged from a loss of €3 million to a profit of €20 million. The three largest figures were posted by Attrax S.A., Fund Channel S.A. and Macquarie Investment Management Europe S.A., for a total amount of €43.4 million. While average profit was €751 thousand, the median stands at €35 thousand and is up compared to the €132 thousand of 2017.

Specialized PSF category:
Net results of specialized PSF varied between a loss of €10 million and a profit of €284 million. Only one PSF posted an extremely high profit compared to the other entities: Clearstream International S.A. with €284 million. Intertrust S.A. is in second position with €35 million. This explains why, despite an average profit of €3.7 million, 82% of the specialized PSF generated profits below or equal to €1 million.

Support PSF category:
Net results of support PSF ranged from a loss of €3 million to a profit of €12 million. The concentration of profit is higher than for the two other PSF categories.
This is confirmed by an average profit of more than €1 million, close to a median figure of €376,000.

The average net profit of a PSF for 2018 amounts to €2 million with no change as compared to 2017.

Figure 6: Range and average net results by PSF category as at 31 December 2018 (in € thousands)



Main expenses of PSF

From the financial statements that we recovered, we analysed the main expenses of PSF. The expenses identified correspond to:

- Staff costs
- External expenses and other operating expenses
- Taxes

Year over year, the distribution of these expenses remains quite stable. However, they do not all carry the same weight from one PSF category to another.

For **investment firms**, personnel expenses rank first and account for 50% of identified expenses. They are followed by external expenses and other operating expenses representing 45%.

For **specialized PSF**, external expenses and other operating expenses and personnel costs account for 94% of identified costs. The distribution of the main expenses is stable compared with 2017.

Among **support PSF**, external expenses and other operating expenses rank first and account for 54% of identified expenses. They are followed by personnel expenses representing 44% in 2018.

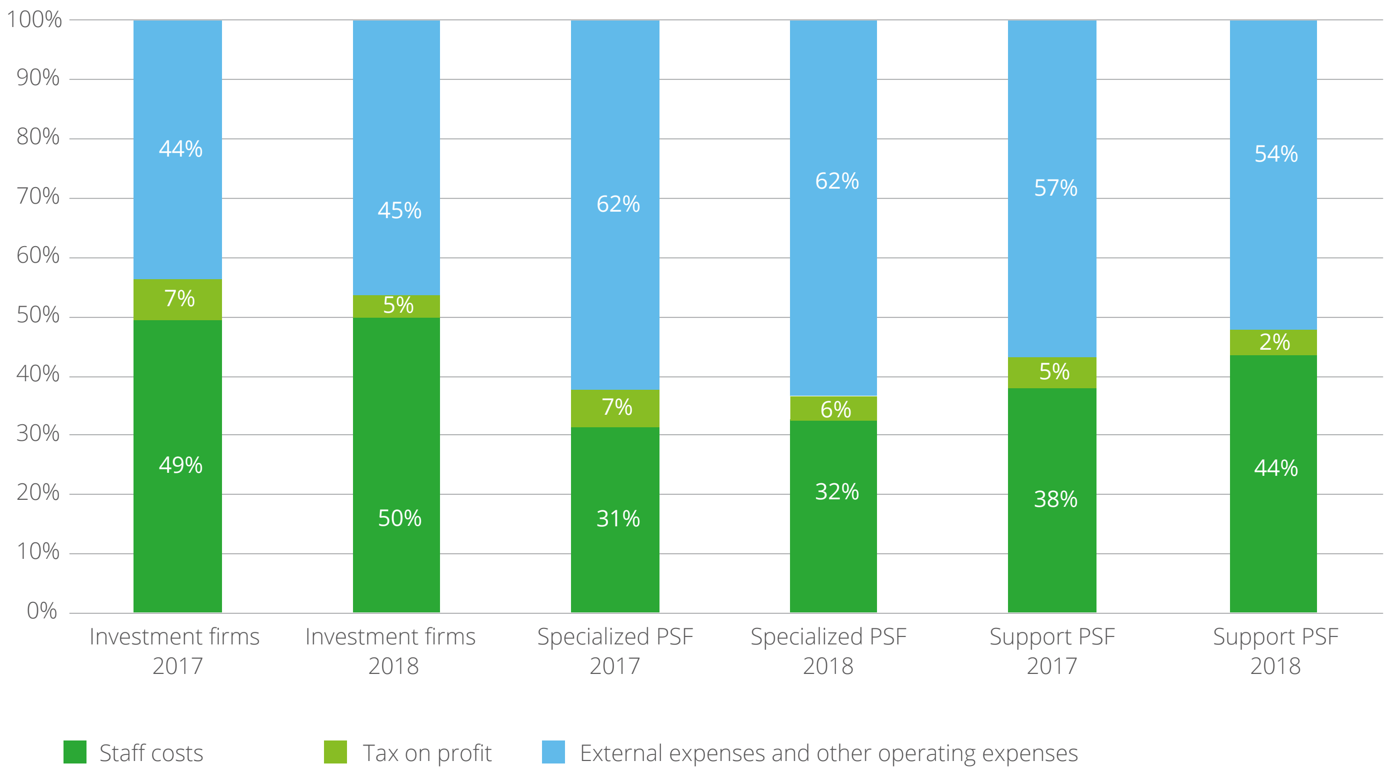
We have calculated the average annual cost of an employee for each PSF category (in € thousands):

- For investment firms: 113 (101 in 2017)
- For specialized PSF: 77 (76 in 2017)
- For support PSF: 57 (63 in 2017)

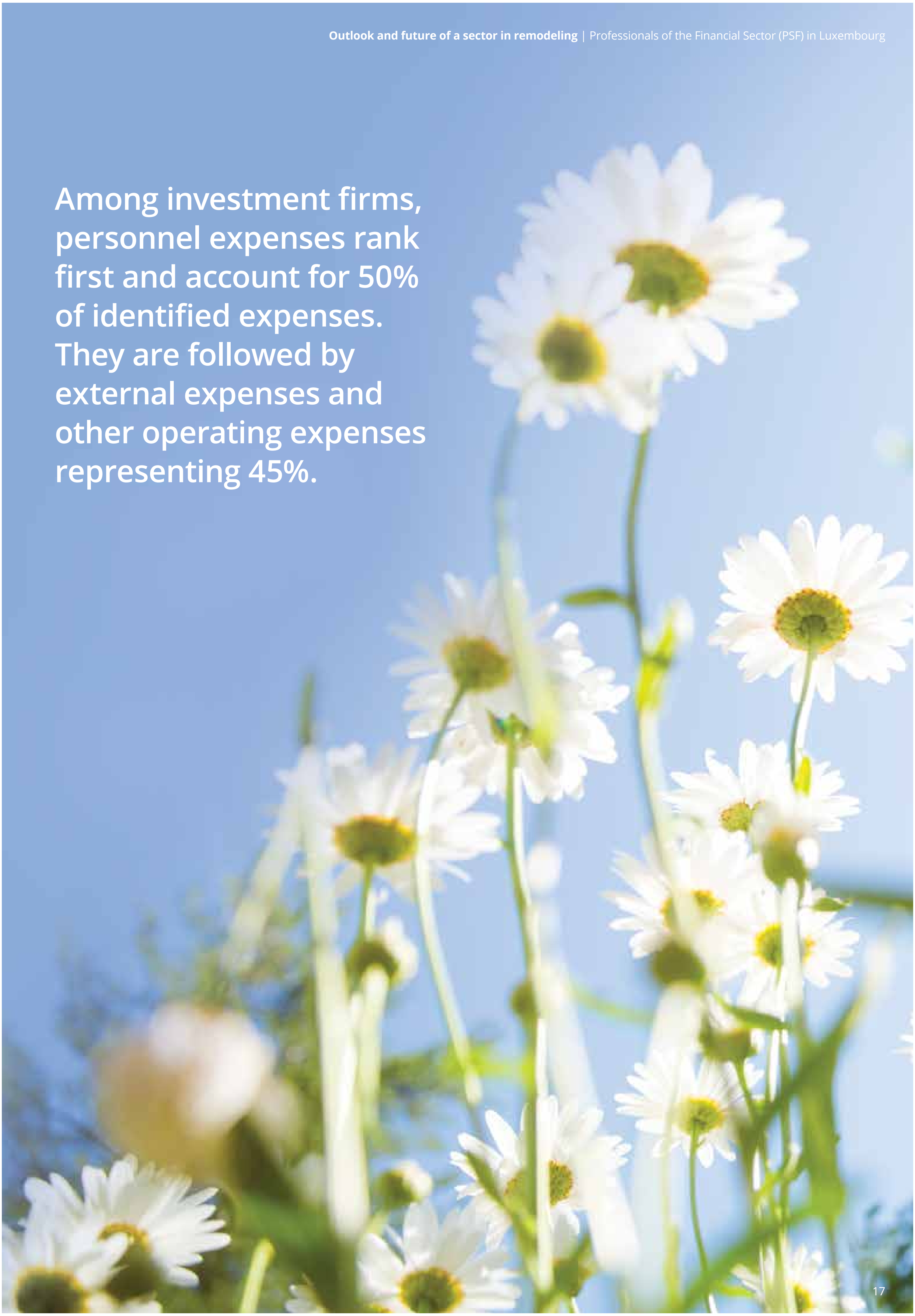
We have also recalculated an effective rate of taxation per PSF category and we note that it is not homogeneous across the different categories (trend also seen in 2017).

- Investment firms: 21% (18% in 2017)
- Specialized PSF: 16% (15% in 2017)
- Support PSF: 26% (19% in 2017)

Figure 7: Breakdown of the main expenses per PSF category as at 31 December 2017 and as at 31 December 2018 (in %)

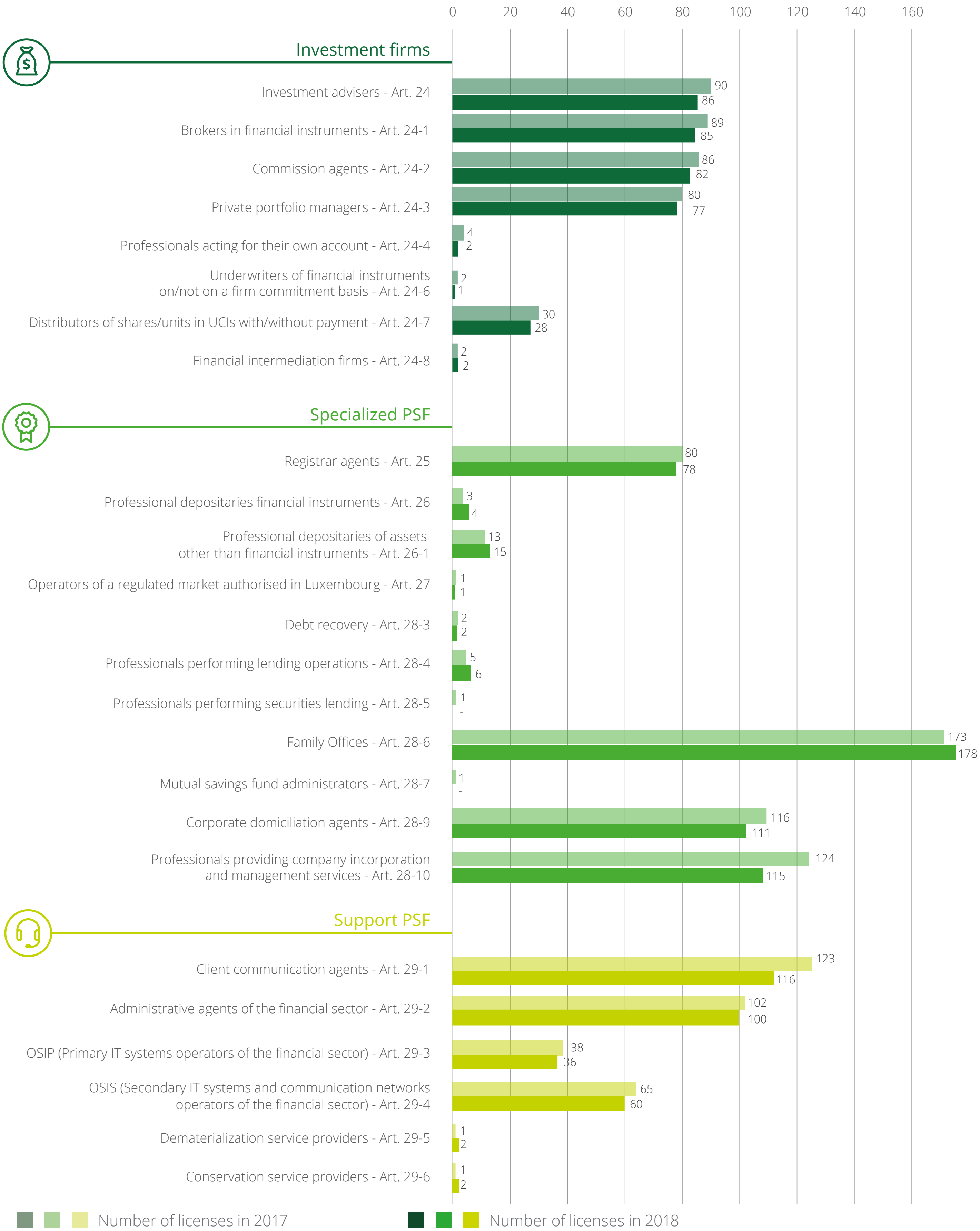


Source: CSSF statistics



Among investment firms, personnel expenses rank first and account for 50% of identified expenses. They are followed by external expenses and other operating expenses representing 45%.

Figure 8: Total number of PSF licenses as at 31 December 2018 and 31 December 2017



Distribution of the number of licenses

As at 31 December 2018, the most widely granted license is still Article 28-6 “Family Office”. Created in 2013, this license met with great success as soon as it was published. It has been granted to 66% of PSF: 98% of investment firms and 83% of specialized PSF (which are all corporate domiciliation agents).

The six most frequent licenses in 2018 are still Articles 28-6 “Family Office”, 29-1 “client communication agents”, 28-9 “corporate domiciliation agents”, 28-10 "professionals providing company incorporation and management services”, 29-2 “financial sector administrative agents” and 24 “investment advisers”.

These six articles account for nearly 60% of licenses as at 31 December 2018.

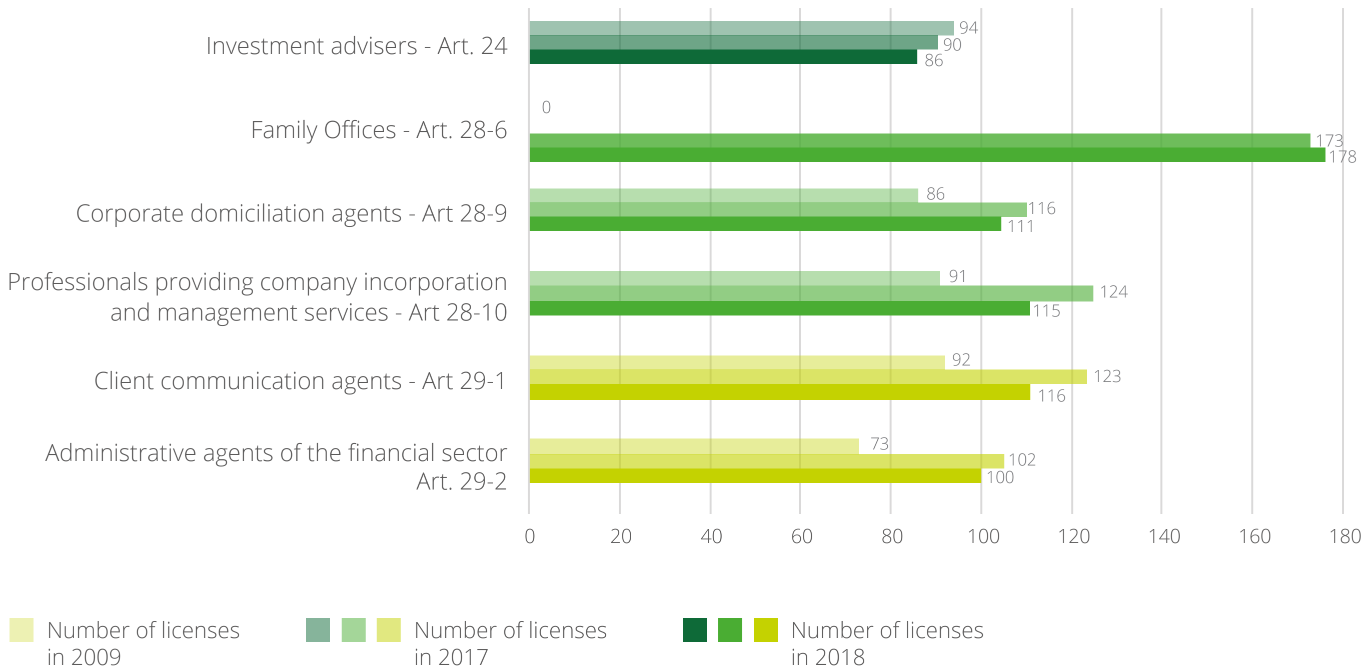
The number of main licenses dropped by 22 licenses in 2018 (706 licenses) compared to 2017 (728 licenses). However, the considerable dynamism seen in 2014 was exceptional, whereas 2017 and 2018 were rather years of consolidation and thus more representative of the trend seen in recent years. So, after the significant rise in the distribution of licenses between 2009 and 2014, a tendency towards concentration on core business has been observed since 2015, which is continuing into 2018.

The "Corporate domiciliation agent" license (Article 28-9) has also risen sharply, from 86 licenses in 2009 to 111 in 2018 (+29%), like the "Financial sector administrative agents" license (Article 29-2) which has gone from 73 to 100 licenses between 2009 and 2018 (+37%).

Finally, in 2018, 15 specialized PSF held the license under Article 26-1 enabling them to carry on the activity of "professional depositary of assets other than financial instruments".

As at 31 December 2018, the most widely granted license is still Article 28-6 “Family Office”.

Figure 9: Change between 2018, 2017 and 2009 in the main six PSF licenses



We can see that 3 licenses (5 in 2017) are not granted to any entity as at 31 December 2018.

These are licenses under articles:

- 24-5 Market Maker
- 28-5 Professionals performing securities lending
- 28-7 Mutual savings fund administrators

Since 2009, we have seen a consistent increase in the number of licenses per PSF speciality, the maximum being reached in 2014. The period between 2009 and 2014 represents a dynamic phase in the granting of licenses for the sector.

Up to 2014, PSF often tended to apply for more licenses than necessary when they were setting up, thereby hoping to avoid having to make a subsequent application to the CSSF to extend their license, which would become necessary if they decided to expand their range of activities.

Since 2015, we have also seen the number of licenses shrink, in line with the decline in the number of PSF. We can also note that PSF are refocusing on their core business and some are shedding the costs and requirements inherent in certain licenses.

All categories considered, the total number of licenses has decreased by 3% in 2018, i.e. there are 42 less licenses than in 2017 (1,190 in 2018, versus 1,232 in 2017).

For the sixth year running, the most widely granted licenses are those of specialized PSF (43% of licenses in 2018, compared to 27% in 2009). Figure 11 details the factors of change in the number of licenses in activity between 2018 and 2017.

These changes break down as follows:

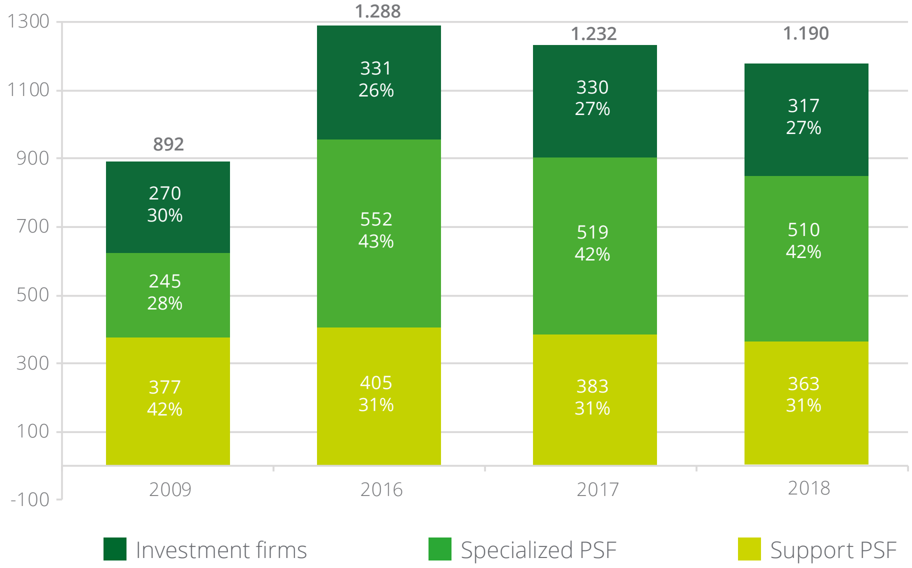
- PSF created during the year
- PSF that already existed (and obtained supplementary licenses or decided to relinquish certain licenses)
- Entities that totally gave up their PSF status

The variations mainly result from PSF statuses created or those given up. While the trend in recent years was to broaden service ranges to be better armed to cope with recession, professionals appear to have reached a certain degree of maturity in their service offering, as the variation in the number of licenses over the year would appear to confirm.

Investment firms mostly hold six licenses (mainly Articles 24 to 24-3, as well as 28-6 Family Office). Specialized PSF mostly hold Articles 28-6, 28-9 and 28-10. This homogeneity is less pronounced for support PSF. While most specialized PSF hold six or seven licenses, a significant number of them hold only three or less.

Similarly, while the majority of support PSF hold only one license, almost the same amount of firms hold two licenses (Articles 29-3 and 29-4).

Figure 10: Change in and breakdown of licenses since 2009



For the sixth year running, the most widely granted licenses are those of specialized PSF.

Figure 11: Change in PSF licenses over 2017 and 2018

Source of increases and declines in licenses	Investment firms 2018	Specialized PSF 2018	Support PSF 2018
PSF created	17	17	-
Existing PSF	11	(1)	(2)
PSF withdrawals	(48)	(25)	(11)
Total change in the number of licenses 2018	**(20)**	**(9)**	**(13)**
Total change in the number of licenses 2017	**(22)**	**(32)**	**(1)**

Figure 12: Distribution of PSF by number of licenses as at 31 December 2018

Number of licenses	Investment firms 2018	Specialized PSF 2018	Support PSF 2018
0	0	0	0
1	0	15	**31**
2	3	3	**28**
3	1	19	5
4	6	8	8
5	**23**	1	2
6	**34**	**34**	
7	4	**25**	
8	9	4	
9	5		
10	3		
11	5		
12	4		
Total	**97**	**109**	**74**

1.2 The PSF: a consistent and steady employer

PSF employ 16,526 people as at 31 December 2018, versus 4,874 for management companies and 26,317 for banks.

Evolution of employment in PSF
Using the latest figures available from the CSSF (December 2018), we find the following distribution of employment in Luxembourg in the financial sector: for a total number of employees of 47,717, all financial sectors considered (banks, management companies according to chapter 15, and PSF), 55% work in banks, 10% in management companies, and 35% in PSF, of which 60% in support PSF.

With 16,526 jobs as at 31 December 2018, a new record in the number of PSF jobs was reached.

Between 2009 and 2018, employment in PSF increased by 23%, whereas employment in banks globally decreased between December 2009 and December 2018.

The breakdown of employees by category of PSF remains stable year over year (figure 14).

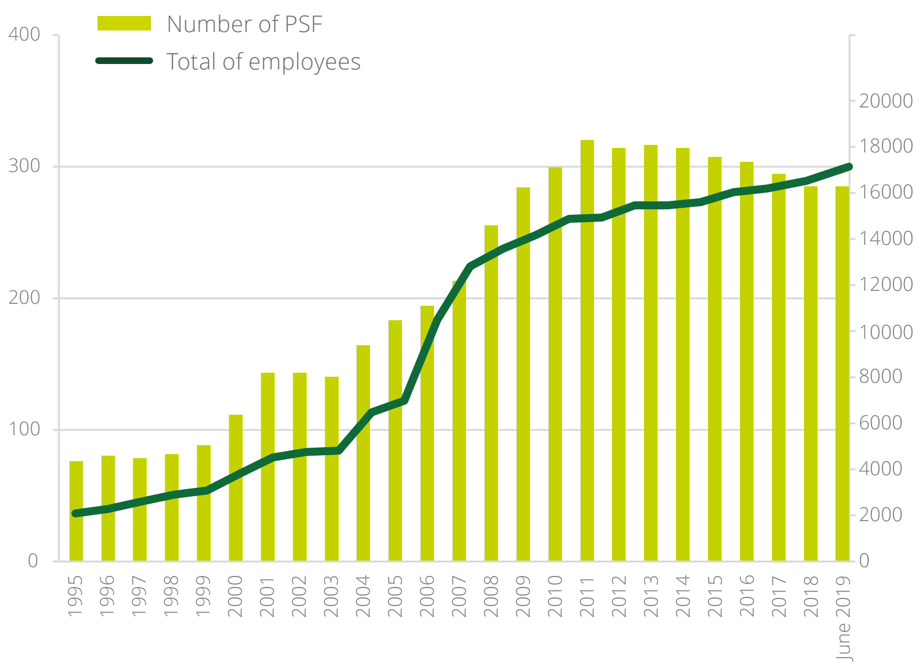
PSF employment figures were relatively stable in 2018, with a slight increase compared to the previous year of 3.7%. However, specialized PSF stand out, with the net creation of 472 jobs over 2018 (+12%), compared to (+1%) % in 2017.

Support PSF saw their employment figures increase during 2018 (+3%).

The analysis that we conducted on the basis of PSF 2018 annual financial statements shows that nearly half of investment firms and specialized PSF have less than 10 employees.

These PSF employ 22 people on average (22 in 2017) for investment firms, 41 people (37 in 2017) for specialized PSF and 134 people (122 in 2017) for support PSF in 2018.

Figure 13: Summary of jobs by year and comparison with changes in the number of PSF



*Source: CSSF statistics based on the most recent available data.

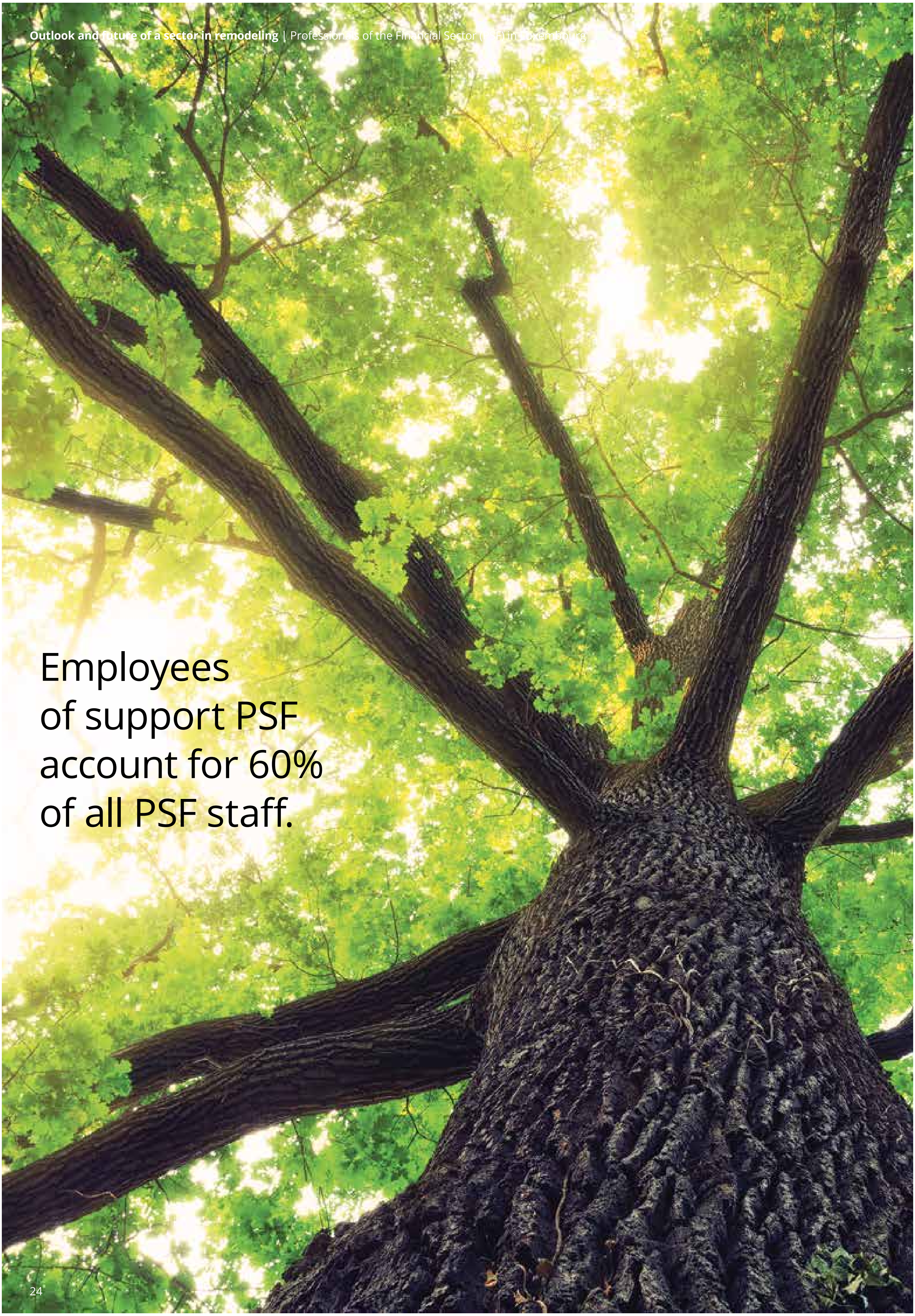
These average figures remain quite high thanks to a handful of entities generating a significant number of jobs:

- The four largest investment firms alone employ in 2018, 1,006 people (with over 100 employees each, EFA having more than 500). The workforces of these companies account for almost 48% of the total number of investment firm employees. Without these four entities, investment firms would have an average workforce of 12 people.
- The number of specialized PSF employing more than 100 people is almost the same (11 in 2018, and 12 in 2017). Among them, there are seven PSF with over 150 employees, totalling 1,907 people. They are Intertrust, International Financial Data Services, IQ EQ, TMF, Vistra, Alter Domus Alternative Asset Fund Administration and Aztec Financial Services. In total, their workforces account for nearly 43% of specialized PSF employees. Without these seven entities, the average staff of specialized PSF would be 25 people (23 in 2017).

We also note that, despite the drop in the number of investment firms and support PSF, the number of jobs remained quite stable, reflecting the same the average number of employees for investment firms (22) and an increase for the support PSF (134 in 2018 and 122 in 2017). This would also seem to indicate that the sector is still attractive and continues to develop its weight in the economy. As at June 30, 2019, based on CSSF statistics, the PSF employed 17,213 persons, i.e., an increase by 4% since end of December 2018.

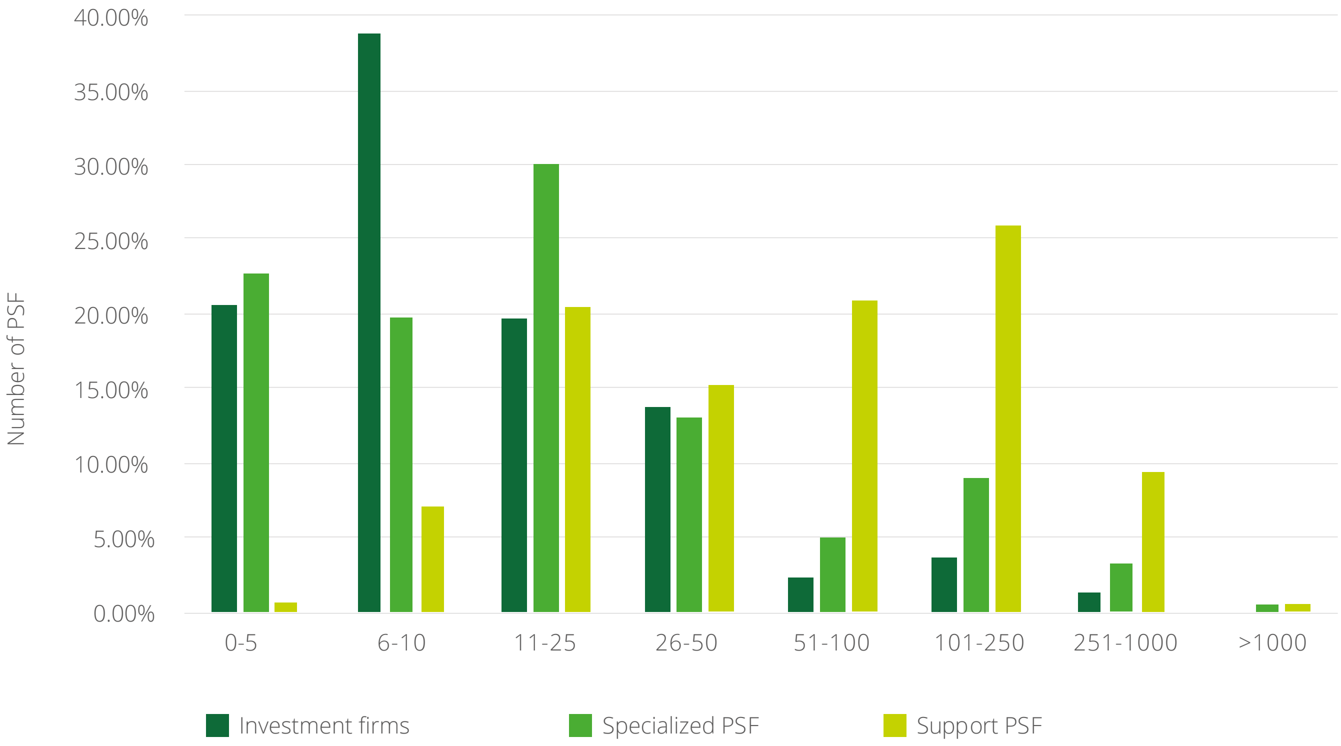
Figure 14: Changes in the number of employees by PSF category

	2017		2018		Evolution	
	Total	Part	Total	Part	Total	Change
Investment firms	2.271	14%	2.115	13%	(156)	-7%
Specialized PSF	4.008	25%	4.480	27%	472	12%
Support PSF	9.656	61%	9.931	60%	275	3%
Total	**15.935**	**100%**	**16.526**	**100%**	**591**	**4%**



Employees
of support PSF
account for 60%
of all PSF staff.

Figure 15.1: Distribution of PSF by number of employees bracket as at 31 December 2018

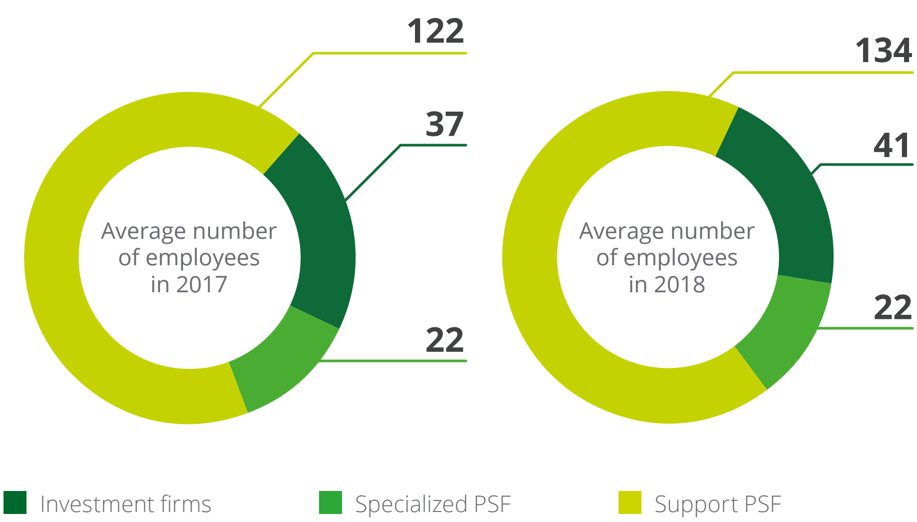


Most support PSF employ between 101 and 250 people, and the average number of employees per support PSF is 134 in 2018 and 122 in 2017.

That average is boosted by five PSF (G4S Security Solutions, Brink's security Luxembourg S.A., Sogeti Luxembourg S.A., Clearstream Services S.A and Proximus Luxembourg S.A), which each employ more than 500 people, totalling 3,854 employees, i.e. 23% of the sector's total workforce.

Without these five PSF, the average workforce of support PSF would be 88 employees (85.1 in 2017).

Figure 15.2: Average number of employees by PSF category in 2017 and 2018



Review of the results of PSF per employee

Following our analysis of PSF annual financial statements, we were able to calculate the average profit per employee. No major changes compared to 2017 for all PSF, (€ 36,147 in 2017 to € 32,946 in 2018).

Specialized PSF show highly variable result figures per employee: between a loss of € 604,241 and a profit of €3.2 million. The average profit by employee amounts to €87,000 in 2018 (€85,500 in 2017).

The increase in average profits per support PSF employee is due to an increase in maximum and minimum average profits that is greater than that of the workforce.

Average profits/employee for investment firms amount to €33,333 in 2018, compared to €60,766 in 2017. This decrease is mainly explained by investment firm statuses being abandoned, including two important players (Merrill Lynch Equity S.à.r.l. and Compliance partner), and to a lesser extent, by a decrease in net result of certain actors year-on-year.

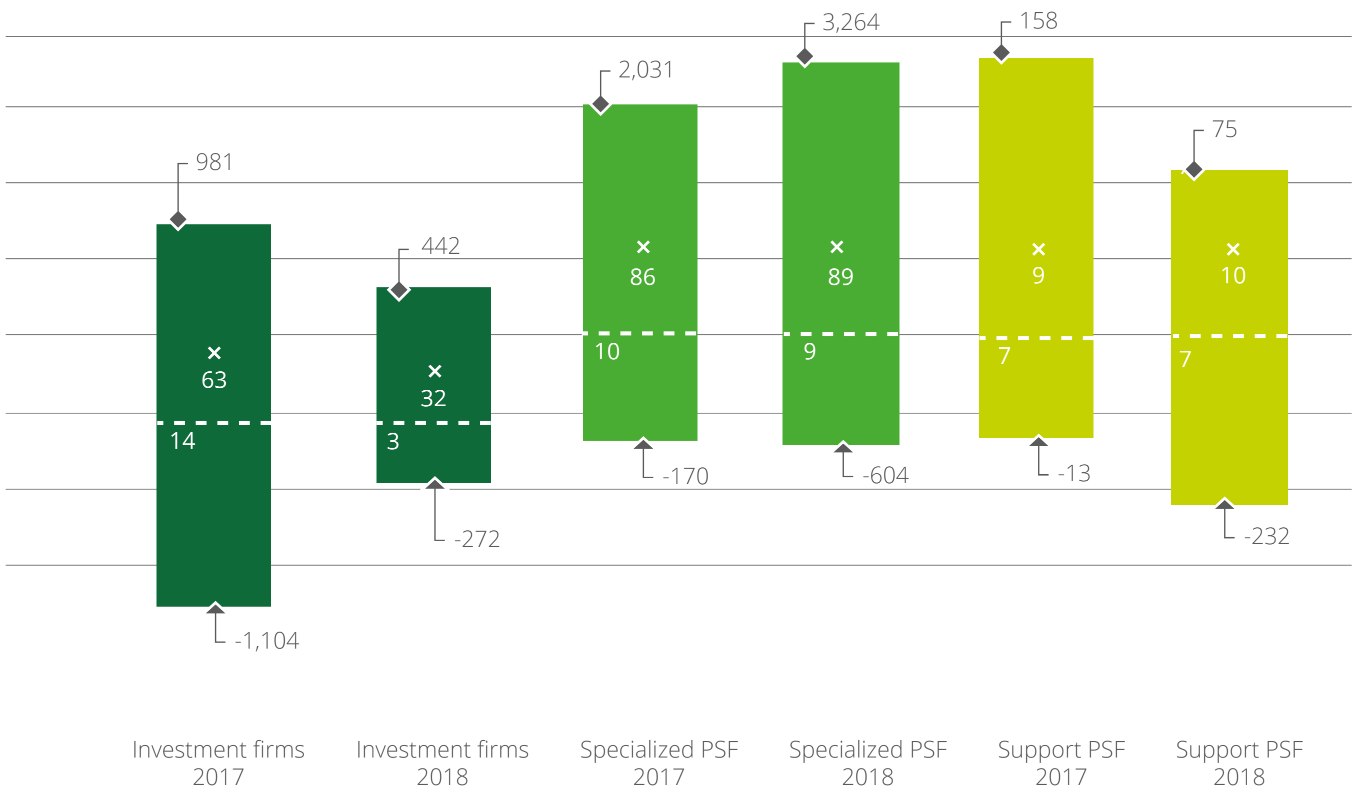
Details of the support PSF workforce

We can see that employees of support PSF account for 60% of all PSF staff. Security and IT services are the activities that generate so many jobs. Thus:

- G4S and Brink's Security (in the security sector) alone employ almost 2,000 people
- Sogeti Luxembourg S.A. and Clearstream Services S.A (which offer IT solutions and services) together employ more than 1, 300 people.

These four companies account for 34% of all support PSF jobs.

Figure 16: Range and average net result per employee as at 31 December 2018 and 31 December 2017 (in € thousands)



	Investment firms 2017	Investment firms 2018	Specialized PSF 2017	Specialized PSF 2018	Support PSF 2017	Support PSF 2018
× Average	63	32	86	89	9	10
- - - Median	14	3	10	9	7	7
▲ Minimum	(1,104)	(272)	(170)	(604)	(13)	(232)
◆ Maximum	981	442	2,031	3,264	158	75

2 Types of PSF

2.1 Licenses in detail

The following table schematically sets out the various categories, as well as the different license types of PSF.

Article License
Minimum capital or financial base

Authorized to act as →

Investment firms

24
Investment advisers
€50,000

24-1
Brokers in financial instruments
€50,000

24-2
Commission agents
€125,000

24-3
Private portfolio managers
€125,000

24-4
Professionals acting for their own account
€730,000

24-5
Market makers
€730,000

24-6
Underwriters of financial instruments **€125,000** (€730,000 if they carry out placements with a firm commitment)

24-7
Distributors of shares/units in UCIs
€50,000 (€125,000 if they accept or make payments)

24-8
Financial intermediation firms
€125,000

24-9
Investment firms operating an MTF in Luxembourg
€730,000

24-10
Investment firms operating an OTF in Luxembourg
€730,000

Specialized PSF

25
Registrar agents
€125,000

26
Professional depositaries of financial instruments
€730,000

26-1
Professional depositaries of assets other than financial instruments
€500,000

27
Operators of a regulated market authorised in Luxembourg
€730,000

28-2
Currency exchange dealers
€50,000

28-3
Debt recovery
-

28-4
Professionals performing lending operations
€730,000

28-5
Professionals performing securities lending
€730,000

28-6
Family Offices
€50,000

28-7
Mutual savings fund administrators
€125,000

28-9
Corporate domiciliation agents
€125,000

28-10
Professionals providing company incorporation and management services
€125,000

28-11
Central account keepers
-

Support PSF

29-1
Client communication agents
€50,000

29-2
Administrative agents of the financial sector
€125,000

29-3
Primary IT systems operators of the financial sector
€370,000

29-4
Secondary IT systems and communications networks operators of the financial sector
€50,000

29-5
Dematerialization service providers of the financial sector
€50,000

29-6
Conservation service providers of the financial sector
€125,000

The appendix to this brochure features the key information on PSF by type of license, with the legal definition of the license and products and services offered, the minimum required capital (or the capital base) and, where applicable, the amount of civil liability insurance required by law in order to carry out the activity.

Due to the high number of statuses that are mostly unrelated to one another, a multitude of combinations of licenses is theoretically possible. It is therefore interesting to look at the main combinations of licenses held by the various PSF.

Figure 17 below groups together licenses by major category of PSF, and the overlaps between categories as at 31 December 2017 and 31 December 2018. It should be noted that branches operating in Luxembourg are only investment firms.

PSF have the option of combining several licenses, but it is the principal license of the PSF, allocated by the CSSF, which determines the PSF category.

An investment firm license takes precedence over the other categories of specialized PSF or support PSF and is
therefore the PSF's principal status. The PSF will thus be identified as an investment firm.

A specialized PSF license takes precedence over a support PSF license and will therefore be the PSF's principal status. The PSF will then be identified as a specialized PSF.

Accordingly, only PSF that do not hold the investment firm or specialized PSF license are support PSF.

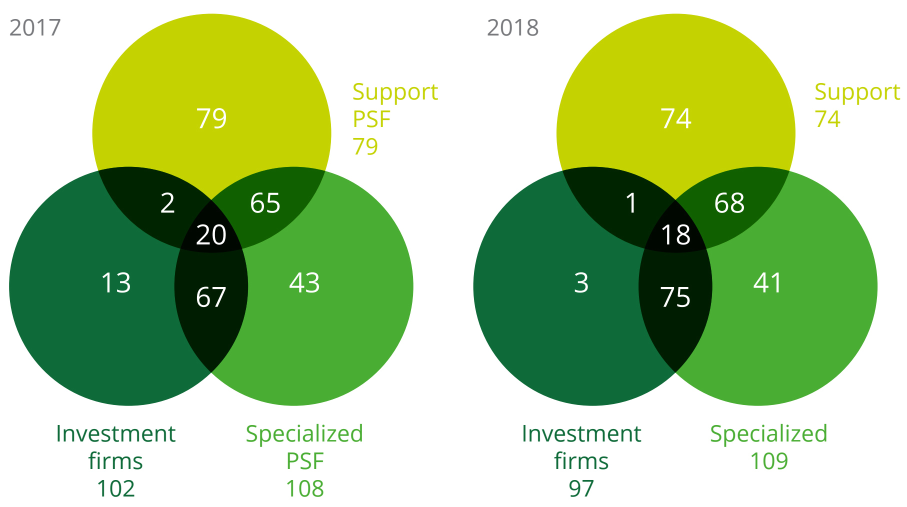
The total number of PSF included in this analysis as at 31 December 2018 was therefore 280:

- 97 investment firms
- 109 specialized PSF (the 93 players with investment firm status too have already been identified above and are therefore not counted as specialized PSF)
- 74 support PSF (the 87 players with investment firm and specialized PSF status too have already been identified above and are therefore not counted as support PSF)

Entities with a status pursuant to at least Articles 24 to 24-10 have been classified as investment firms. Specialized PSF are entities with a license under Articles 25 to 28-11.

Support PSF are entities that only have licenses under Articles 29-1 to 29-6.

Figure 17: Licenses of PSF by category



2.2 Investment firms

As the only PSF category to have the European passport for the distribution of their products and services, investment firms can set up branches and freely provide services merely by filing a single notification to the authorities of other European Union Member States.

The number of investment firms included in the analysis as at 31 December 2018 was 90.

At year-end 2018, nearly all the investment firm PSF have one or more, or even all of the following four licenses:

- 86 hold an investment adviser license (Art. 24)
- 85 have a license as brokers in financial instruments (Art. 24-1)
- 82 have a license as commission agents (Art. 24-2)
- 77 have a license as private portfolio managers (Art. 24-3)

Another license widely held in investment firms corresponds to the status of distributor of shares/units in UCIs (Art. 24-7). This status is indeed held by 22% of investment firms.

Many of these PSF also hold additional licenses relating to other PSF categories and particularly to the Family Office license (Art. 28-6). However, of the 88 investment firms holding this license, only 40, or less than half, actually carry on this activity.

The other additional activities are quite uniform and primarily concern providers of company incorporation and management services (Art. 28-10), client communication agents or financial sector administrative agents (Art. 29-1 and 29-2), registrar agents (Art. 25) and corporate domiciliation (Art. 28-9) (Figure 18). A drop is seen in licenses held by investment firms between 2017 and 2018 (see Figure 18) from 594 to 559, mainly due to the net withdrawal of such PSF in 2018.

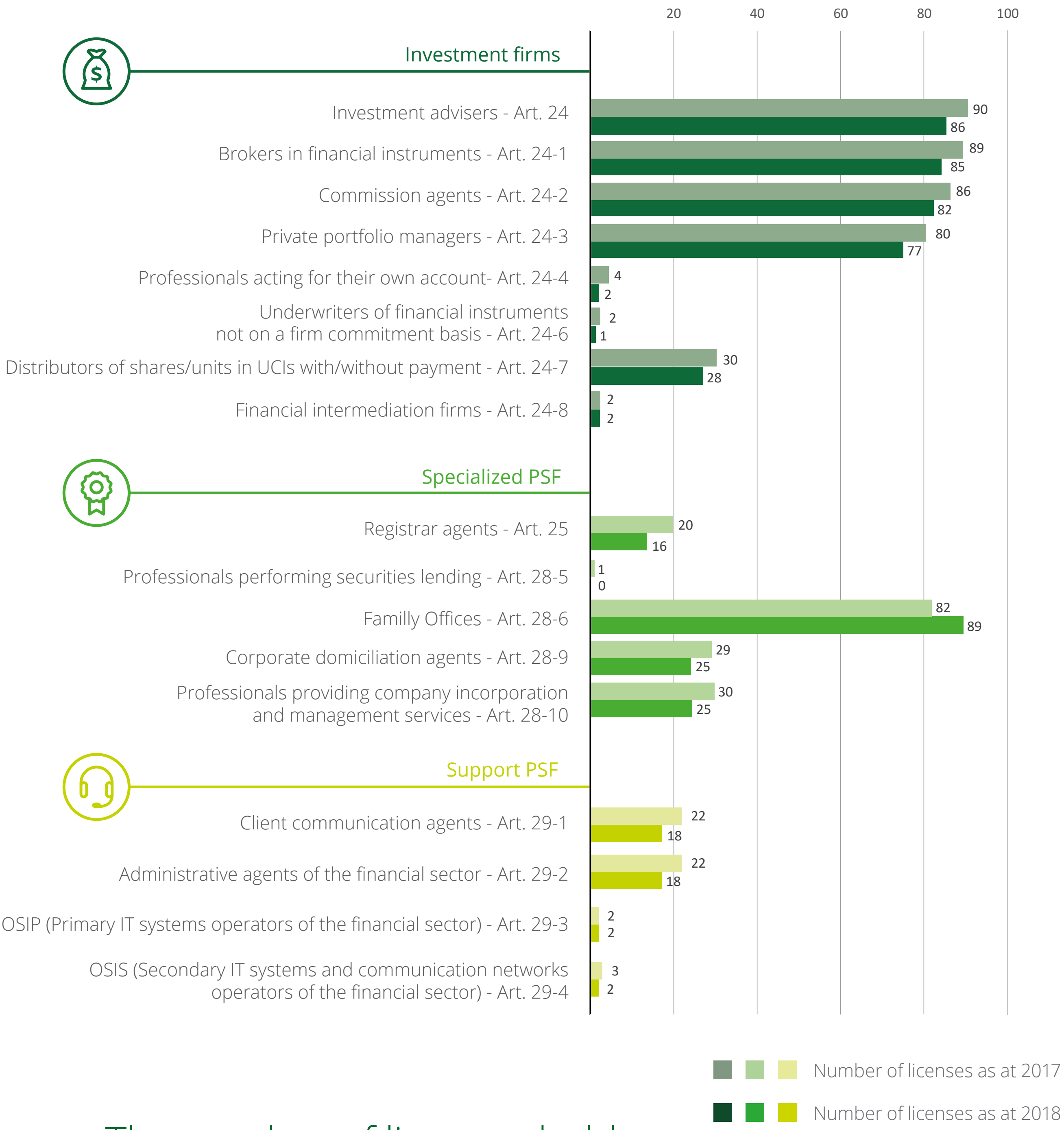
Among investment firms, we now distinguish two categories, those governed by the CRR (Common Reporting Regulation) and those that are not. In practice, the former are subject to a closer supervision and fall within the province of the European Central Bank.

The scope of the CRR is limited by the definition of investment firms under Article 4(1)(2) of the Regulation (EU) 648/2012 CRR as amended by Regulation (EU) 575/2013. Therefore, investment firms providing certain categories of investment services fall within the scope of the CRR, as they are considered to be quasi-banks. They are mainly private portfolio managers that directly offer their customers accounts carried by a bank via so-called omnibus accounts.

CRR investment firms are subject to specific rules, in particular with regard to supervision on a consolidated basis, to specific prudential reporting requirements – such as the Liquidity Coverage Requirements (LCR) or Net Stable Funding Requirements (NSFR) – and to regulatory equity.

Between the end of 2017 and the end of 2018, the number of CRR-governed investment firms dropped from 30 to 25.

Figure 18: Licenses granted to investment firms as at 31 December 2018 and as at 31 December 2017



The number of licenses held by investment firms has tended to stabilize between 2017 and 2018.

Questions to **Gael Minon** Director of Birdee (Luxembourg) S.A.

What changes do you expect for private portfolio managers?

In addition to the growing regulatory impact that has brought many challenges for private portfolio managers in terms of cost and profitability, clients are increasingly in search of new investment products, transparency, and a motivation to invest, such as investments with a societal impact.

This change in regulations and behavior (from the customers and the market) should encourage investment firms to reinvent their strategies, and move towards a more extensive use of digital technology. Not only does it automate certain checks and processes, above all, it changes the way clients interact with private portfolio managers and define their investment preferences. Digitization also brings more visibility to investment choices and the social impact that investors can have on the economy.

Despite the regulatory and technological changes that considerably affect the costs and profitability of investment firms, they nonetheless have great prospects for expanding into niche markets. Digital technology, the type of product, transparency, and expertise are key success and differentiation factors when it comes to meeting clients' individual needs and coping with increasingly fierce competition on an international scale. This competition is set to heighten following the emergence of new players who have already gained major technological know-how and expertise, such as GAFA (Google, Amazon, Facebook and Apple), and are already active in the electronic payments market. In the coming years, these new players will also be present in other sectors that are currently dominated by traditional private portfolio managers.

What are the main opportunities for the PSF you represent?
The main opportunities stem from client needs in terms of investment product customization and transparency. The future will be bright for PSFs that invest in new digital technologies—online brokerage platforms granting access to a host of investment markets via smartphones; a Robot Advisor that helps clients select investment products depending on the risk and profitability of the different financial products available to them, etc. It will also be bright for those PSFs that offer new investment products or that focus on existing products, but with greater visibility in terms of risk and return.

Another opportunity linked to digital technology is the improvement in and customization of communication with the client, and the possibility of addressing new social issues defended by new generations. However, it would be wrong to merely build a digital front for existing activities, as digital technology must only be a means of developing these niches, not an end in itself.

I would also like to underline the importance of the European passport that investment firms hold, as it grants access to other European markets, thereby securing a greater return on regulatory and technological costs and improving profitability.

What are the main challenges facing Luxembourg for the business sector you represent?
Any change involves challenges, whether positive or negative. In my opinion, the constant changes to regulations are the most significant challenge facing investment firms. They not only demand considerable compliance work and a lot of time and money, they also call for greater efforts in terms of transparency, confidentiality, and protecting investor interests, as we saw with legislation stemming from the GDPR and MiFID. Investment firms should regard these challenges as a differentiating factor, rather than a hindrance to their development. In this context, a privacy-by-design' policy should be a key focus.

Furthermore, the persistently low interest rates, the fragility of public pension systems, and pressure on margins will bring structural changes to the industry. Investment firms must rise to the challenge of reviewing their business models in depth and implementing a new way of doing business. Digital technology is the driver of this change.
Another major challenge is the shortage of talents, particularly in digital marketing. The profiles currently found in Luxembourg do not match the demand of investment firms specializing in digital, and this is prompting certain organizations to turn to outsourcing or to look for these profiles elsewhere, in France and Belgium.

Heavy administrative procedures represent another challenge because they increase the time it takes to process certain applications and authorizations necessary for investment firms to do business. This can cause them to miss out on opportunities for developing new products and reaching out to new types of clients.

What are your expectations?
Firstly, I would like to see more cooperation between economic players and the academic world in order to set up market-oriented training courses with the aim of filling the gap between demand for and supply of talents and shaping profiles tailored to the job market in Luxembourg.

Secondly, there is a real need for more agility. The administrative procedures central to the sustainable development of investment firms' business must therefore be facilitated.

Lastly, mobility requires regulatory changes to give investment firms' staff more flexibility to work from home, while continuing to protect client data and ensuring the information they process within the framework of their everyday duties is kept confidential.

Interview by Raphaël Charlier and Helmi Gargouri – 1 October, 2019

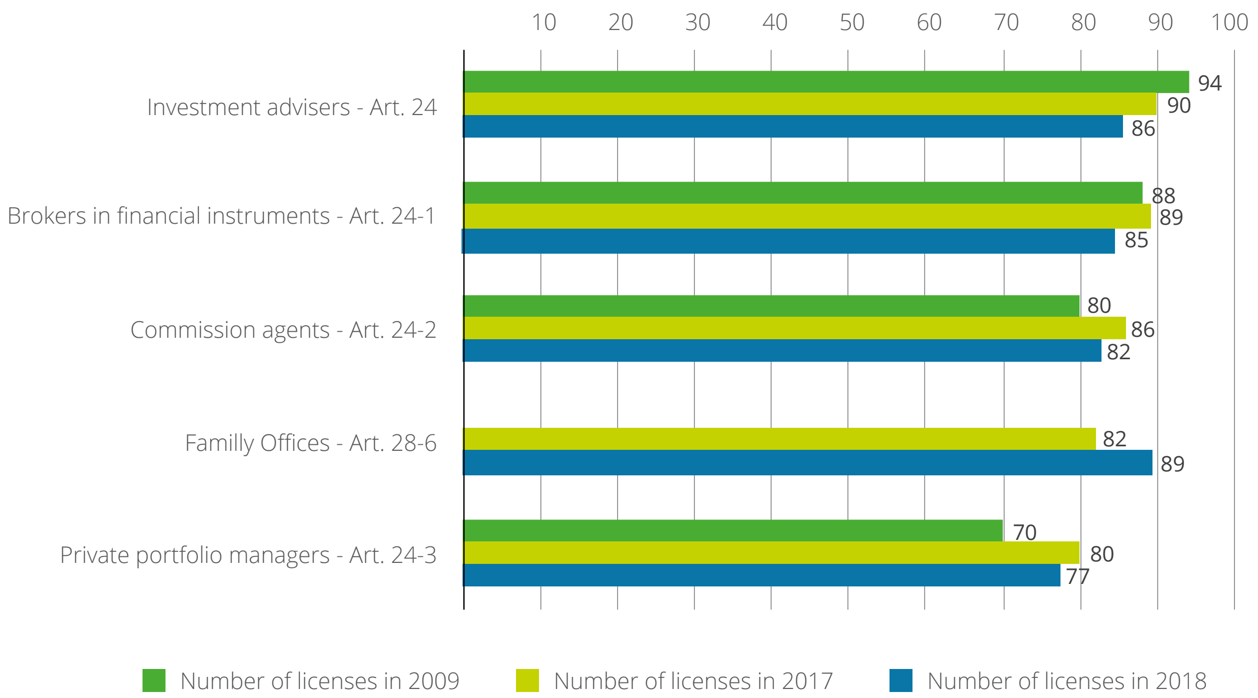
Excerpt from our report entitled "Independent Wealth Management Luxembourg – Perspective on a sector at crossroads" of June 2018.

The market of external asset managers operating under the status of investment firms (pursuant to Articles 24, 24-1, 24-2 and 24-3) represents 94 entities and 2,181 jobs in Luxembourg. They collectively manage approximately €29 billion in assets, generating around €600 million in revenues. On average, private portfolio managers under Article 24-3 of the law of 5 April 1993 have assets under management representing approximately €400 million. Although the number of asset managers has remained quite stable in recent years, the sector recorded a compound annual growth rate of 12% between 2013 and 2017. While their financial performance has improved in recent years despite the challenges facing wealth management, it is expected to be impacted by MiFID II going forward. External asset managers operate under a variety of business models including as independent wealth managers, platform-based managers, players operating in open architecture, those focusing on fund-based asset management and multi-family offices. They have a large geographical footprint: only 16% of assets under management come from Luxembourg-based clients, the great majority of clients in terms of assets under management coming from other countries, such as Belgium, France, Italy, Spain, Portugal, Switzerland and other continents. External asset managers manage approximately 70% of assets from Benelux and France deposited in Luxembourg-based banks.

In terms of innovation, FinTech companies develop digital solutions for the wealth management sector while also focusing on the needs of external asset managers.

The market of external asset managers operating under the status of investment firms represents 94 entities and 2,181 jobs in Luxembourg.

Figure 19: Change between 2018, 2017 and 2009 in the five main licenses held by investment firms as at 31 December 2018



Sustainable finance
What role does the PSF Play

Julie Castiaux
Senior Manager - Audit & Assurance
Deloitte

In recent years, global initiatives such as the United Nations 2030 Agenda for Sustainable Development or the Paris Agreement on climate change have paved the way towards the development of a more sustainable and responsible society. To support this transition and the achievement of these global commitments, there is a need to mobilize the public and private financial capitals. At a European level, the EU commission released the Action Plan on Financing for Sustainable Growth in March 2018. Its objective is to provide the market and investors with more transparent information to guide them in considering ESG (Environmental, Social, and Governance) contribution in addition to positive financial return.

The attraction of sustainable investment at the European level is evolving and the purpose of the upcoming regulations is to provide a framework for supporting financial professionals in designing their products. Investors have an important role to play in this transition and the main challenge in the coming months will be for the asset managers who will need to translate the investors' expectations into their investment strategies. Regulations and Directives that will come into force during 2021, will definitely facilitate the exchange and communication between investors and financial advisors.

As Europe's leading financial center, Luxembourg is ideally positioned and, with the first EIB Green Bond issued in 2007, it is also a pioneer in the development of sustainable finance.

The latest report on the Global Green Finance Index released in September 2019 shows that Luxembourg appears in second place within the in depth index and in seventh place for the quality of green finance offerings . To keep its first-mover advantage, in 2018 Luxembourg developed a sustainable finance strategy. The roadmap for this strategy proposes policy options to ease the access to sustainable finance, to support asset managers with expertise, and to provide sustainable enterprises with long-term funding.

As a result of this sustainable finance strategy developed over recent years, Luxembourg has become one of the main domiciles for responsible investing with a 38 percent market share of responsible funds in Europe and 57 percent of total assets under management.

Overview of upcoming regulations on sustainable finance

To maintain our competitive advantage, Luxembourg financial markets' players now need to understand and to address the challenges and opportunities offered to them. The main trial that professionals will face over the coming months will be linked to the integration of the upcoming regulatory obligations. Existing directives such as MIFID II, UCITS Directive, and AIFMD have been revised by the ESMA to integrate the sustainability risk and will come into force in the coming months:

MIFID II: Requirement to collect **ESG preferences** when defining the **investor profiles** and integrate ESG considerations into the **suitability framework**, meaning that investment firms and insurance companies will have to **select ESG products** and **integrate them into their investment offering.**

UCITS Directive and AIFM Directive: Amendments to **incorporate** sustainability risks in due diligence processes and **assess and manage the sustainability risks** stemming from their investments.

In addition to the review of existing directives, the EU Commission has already approved a **new regulation on sustainability-related disclosures in the financial services sector.** The purpose of this regulation is to provide more transparency over the consideration of sustainability risks into the investment decision-making process as well as on environmental and social consideration. The first impact will be linked to the obligation of producing **a sustainability risks policy** and in presenting the principal adverse impact of investment decisions on sustainability factors. In addition, when an asset manager designs a financial product with a purpose to **promote environmental or social characteristics** or with an **environmental or social objective**, disclosure on how those characteristics or objectives are met will be mandatory. This obligation will also impact financialaAdvisors with the same purpose of transparency to consider environmental and social dimensions in their investment or insurance advice.

Luxembourg has become one of the main domiciles for responsible investing with a 38 percent market share of responsible funds in Europe and 57 percent of total assets under management.

As part of the Commission's Action Plan on Financing Sustainable Growth, the EU regulation 2016/2011 on Benchmark will be amended to integrate the creation of **two types of climate benchmarks**; the EU Climate Transition Benchmark (EU CTB) and the EU Paris-aligned Benchmark (EU PAB). In addition, an **ESG disclosure will be applicable to all investment benchmarks.** The final objective is to facilitate investors' decision-making process toward better performance comparison.

Finally, the Technical Expert Group on Sustainable Finance in charge of supporting the EU Commission's action plan, recently released a Taxonomy Technical Report with the purpose of providing a common definition of an environmentally sustainable activity. The taxonomy is therefore meant to address three challenges: (i) harmonizing market practice at European level, (ii) reducing greenwashing, (iii) and facilitating the investor's decision by flagging taxonomy eligible activities.

Market challenges and opportunities

One of the **first challenge will be to understand the customer expectations** in terms of consideration of the ESG characteristics within the investment decision-making process. The amendment of the Directive MIFID II will request financial advisors to collect ESG preferences when defining investor profiles and integrate ESG considerations into the suitability framework. This means that investment firms and insurance companies will have to select ESG products and integrate them into their investment offering. This will require a standardization of ESG information to communicate to investors and to ease the comparability.

While discussing information collection, the financial sector professionals will play an important role in ESG data aggregation. The trend towards more conscious investments brings an opportunity to create a new value proposition for clients, going beyond the traditional processor role. As ESG factors are increasingly incorporated into investment strategies, asset managers are turning towards financial sector professionals for data and analytics. Indeed, they could extend their service offering to integrate ESG factors into their reporting frameworks.

Asset managers will also have **to better represent their investors by not only relying on external ESG data, but also in playing an engagement and voting role**. The voting and engagement strategy is another method that may have a direct impact on corporate governance of companies. Thus, asset managers are more and more willing to take an active part in management as revealed by the 17 percent sustainable assets' growth in corporate engagement and shareholder action between 2016 and 2018.

As a result, looking at the proxy voting history and votes on climate-related shareholders resolutions could be another efficient way for investors to select their ESG-focused funds. These elements create significant opportunities for asset servicers to improve their proxy voting services by including ESG factors. It is all the more important as the new Shareholder Rights Directive II is asking intermediaries to facilitate shareholders' rights to participate and vote in general meetings.

As demonstrated, the future of ESG investment will offer a panel of opportunities for the various industry actors in developing new services supporting the industry in its transition toward more sustainable and responsible investments. To achieve that transition, raising awareness, educating, and developing capabilities will be necessary as well as developing the framework to ensure standardization and the reliability of information being disclosed. While financial performance remains the main attractive choice for investing, the new generation of investors will definitely demonstrate that ESG performance can provide better long-term risk management and increase intangible values of investment. The future of finance will be sustainable and the time is now.

1 The Global Green Finance Index 4 – September 2019

2 European responsible investing fund market 2019

Internal governance: the next quantum leap

Arnaud Barosi
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Gianfranco Mei
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In light of the overall European regulatory trend, the National Competent Authorities' (NCAs) demand for enhanced internal governance (e.g. roles and responsibilities of management/governing bodies) and accountability of key function holders (e.g. Board members) has reached unprecedented levels in recent years and is still intensifying.

Despite the fact that the level of applicable Luxembourg regulatory requirements on this subject may significantly differ between the different licensed entities—investment firms (e.g. ESMA guidelines) versus other PFS (e.g. CSSF Circular 17/656)—,the latest regulatory on-site inspections demonstrate the willingness of Luxembourg NCA to apply sound internal governance arrangements and practices. These include an outline for roles and responsibilities of the Board and the Executive Committee; fit and proper concept; decision-making center; remuneration principles; three lines of defense; tone-from-the-top; outsourcing; new product approval process and know-your-structure already defined in the banking regulation.

In addition, higher market uncertainty driven by the pressure to meet clients' expectations and cost-efficiency, integration of multiple regulated entities following M&A transactions, the need to comply with a rapidly evolving regulatory landscape while operating a lean, efficient organization, has resulted in the need for Luxembourg-regulated entities to bolster the effectiveness of their organizations' internal governance models.

Many Luxembourg-regulated entities have come to realize that, in order to remain competitive, the efficiency/effectiveness of their adopted governance and internal control framework are key to the future of their organization.

The components of a sound internal governance operating model
An internal governance operating model is the mechanism used by the Board and executive management to translate the elements of the internal governance framework and policies into practices, procedures, and job responsibilities. It is also especially focused on the effective operational implementation of regulatory matters within the corporate governance arrangements, which management has put in place to govern day-to-day organizational activities. It includes the processes used to gather and report information to the Board and external stakeholders (e.g. NCA), as well as to management.

Key aspects of an effective internal governance operating model that should be addressed:

- **Board oversight and responsibilities:** The Board carries out oversight responsibility across the organization in areas such as business and risk strategy, organization, financial soundness, and regulatory compliance. In this regard, the internal governance operating model should help the Board to:
  - Articulate the skills and knowledge it requires to effectively execute its oversight responsibilities, and to assess its composition against those needs
  - Engage management in providing the right "management information" the Board requires to exercise governance and risk oversight
  - Advise management on policies that ultimately influence the manner in which governance is conducted
  - Avoid Board being involved in the day-to-day management, but instead acts as an escalation process for trigger events with the aim to define efficient and prompt remediation
  - Understand governance activities that occur at various levels within the organization, and support management in its efforts to enhance program efficiency, and effectiveness.

- **Committee authorities and responsibilities:** Effective Board committee and management committee structures can help define the number, terms, and qualifications of members, committee responsibilities, reporting and escalation mechanisms, and ways in which Board and management committees will interact including:
  - Design of committee charters (also called terms of references) that define the work and functioning of governing/management bodies, committee's roles and responsibilities, its composition, its frequency of meetings, and its powers (including involvement of chairperson and veto rights)
  - Defining the types of decisions, events, risks, and other items that should come to the committee's attention (and, when applicable, thresholds or amounts), and acting as an escalation process
  - Delineating methods of escalating and reporting significant matters to the appropriate person or committee.
- **Management accountability and authority:** Well-understood authority and accountability for key responsibilities are needed at all levels and in all areas of the organization. A sound internal governance operating model will:
  - Ensure that the concept of a decision-making center remains at the level of the regulated entity, in the jurisdiction it operates through the Board and the executive committee according to their area of responsibilities
  - Define clear decision rights so that people understand the authority—and the limits of the authority—associated with their positions
  - Balance global and regional strategies by delineating the authority and accountability for key roles and specifying a process for resolving or escalating disagreements.
- Overall organizational design and reporting structure: A clear, comprehensive organizational structure normally defines reporting lines for decision-making, risk management, financial and regulatory reporting, and crisis preparedness and response. In an enterprise governance operating model, the organizational structure could enable Board and executive management to:
  - Define a process of overseeing the spectrum of risks across all regions and businesses, including strategic, operational, compliance, IT, reputational, and other risks (e.g. AML/CTF)
  - Maintain an internal governance structure that is understandable to internal employees and external stakeholders
  - Establish the independence and authority of the internal control functions

The internal control functions provide assertive leadership, which enhances the organization's commitment to robust internal control framework.

The expanded role of internal control functions

As a result of the latest changes in the financial industry, including the new and challenging regulatory landscape, the role of internal control functions in organizations has expanded. In efforts to better manage the risk facing their organizations, financial institutions are looking to their internal control functions to add value to their management governance structure.

The internal control functions provide assertive leadership, which enhances the organization's commitment to robust internal control framework. An effective partnership with executive management and Board members allows internal control functions to assist them in fulfilling their Board duties and responsibilities in the fast-changing governance environment.

Aligning the internal control function's role with a firm's business strategy helps to better manage risk in a number of ways:

- **New-business initiatives:** More and more, internal control functions are playing a role in constructively challenging product development and business expansion so that appropriate controls are in place from the start (concept of new product approval process) and that the business strategic plan is built in a regulatory/risk management feasible way.

- **Heighten visibility**: Internal control functions can act as an objective risk and control evaluator for the Board and executive management through direct reporting to the Board committee and administrative relationship with executive management.

- **Comprehensive risk assessments:** Financial institutions are relying on their internal control functions to conduct robust risk assessments (e.g. compliance risk assessment). In addition, with the limitation of resources that the internal control functions may have, they have to be in the right place, at the right time and doing the right things, with the right set of skills. Therefore, proper risk assessment is critical and helps the internal control functions to evaluate the effort and target areas that matters.

- **Third-party compliance:** With the growing reliance on third-parties through outsourcing, financial institutions are asking internal control functions to be part of the oversight of business partners, including group entities.

- **Champion governance activities:** With the growing demand for enhanced and increased governance activities, internal control functions must be part of the continuous assessment/challenge of the internal governance's operating model.

The NCA expects internal control functions to play a major role in the corporate governance framework by improving overall performance and operating efficiency with the aim to elevate them to an even more strategic and productive role in corporate governance. The collaboration of these independent control functions within the entity, should help executive management face the serious dilemma in striking a balance between complying with regulations, managing costs, and garnering benefits around an improved internal control environment in order to attain and sustain compliance.

2.3 Specialized PSF

Unlike investment firms, specialized PSF do not benefit from the European passport, but may carry out financial activities in Luxembourg. There are 109 specialized PSF as at 31 December 2018, versus 108 in 2017.

This category covers three main sub-groups. The first sub-group includes the 86 corporate domiciliation agents (Art. 28-9) at year-end 2018 (same as year-end 2017). We note that:

- They also hold licenses under Art. 28-10 as professionals providing company incorporation and management services and Art. 28-6 as Family Offices (in 100% of cases).
- About 70% of them hold licenses as registrar agents (Art. 25), client communication agents and financial sector administrative agents (Art. 29-1 and 29-2).

The second sub-group includes 62 registrar agents (Art. 25):

- All of them have the support PSF licenses under Art. 29-1 and 29-2 respectively as client communication agents and financial sector administrative agents.
- Almost all of them have the specialized PSF licenses as corporate domiciliation agents (Art. 28-9), as professionals providing company incorporation and management services (Art. 28-10), and as Family Office (Art. 28-6).
- Only one holds a license as a secondary IT systems and communication networks operator of the financial sector (Art. 29-4).

The third and last sub-group includes the six professionals carrying on lending operations (Art. 28-4). This license appears to be unique in that, apart from one case, it is not held together with any other license.

These are mainly subsidiaries of banks such as BIL, ING or BNP, and subsidiaries of international groups such as PK Airfinance S.à r.l. These entities carry out financial or operational leasing activities.

The number of licenses held by specialized PSF rose from 484 in 2017 to 488 in 2018.

Between 2009 and 2018, the number of specialized PSF licenses rose from 255 to 488, which is a 91% growth over 9 years. Apart from the Family Office license launched in 2013, the most spectacular increase in specialized PSF licenses between 2009 and 2018 is that of licenses specific to support PSF, and more particularly under Art. 29-1 and 29-2 (+96% and +91% respectively).

Figure 20: Licenses granted to specialized PSF

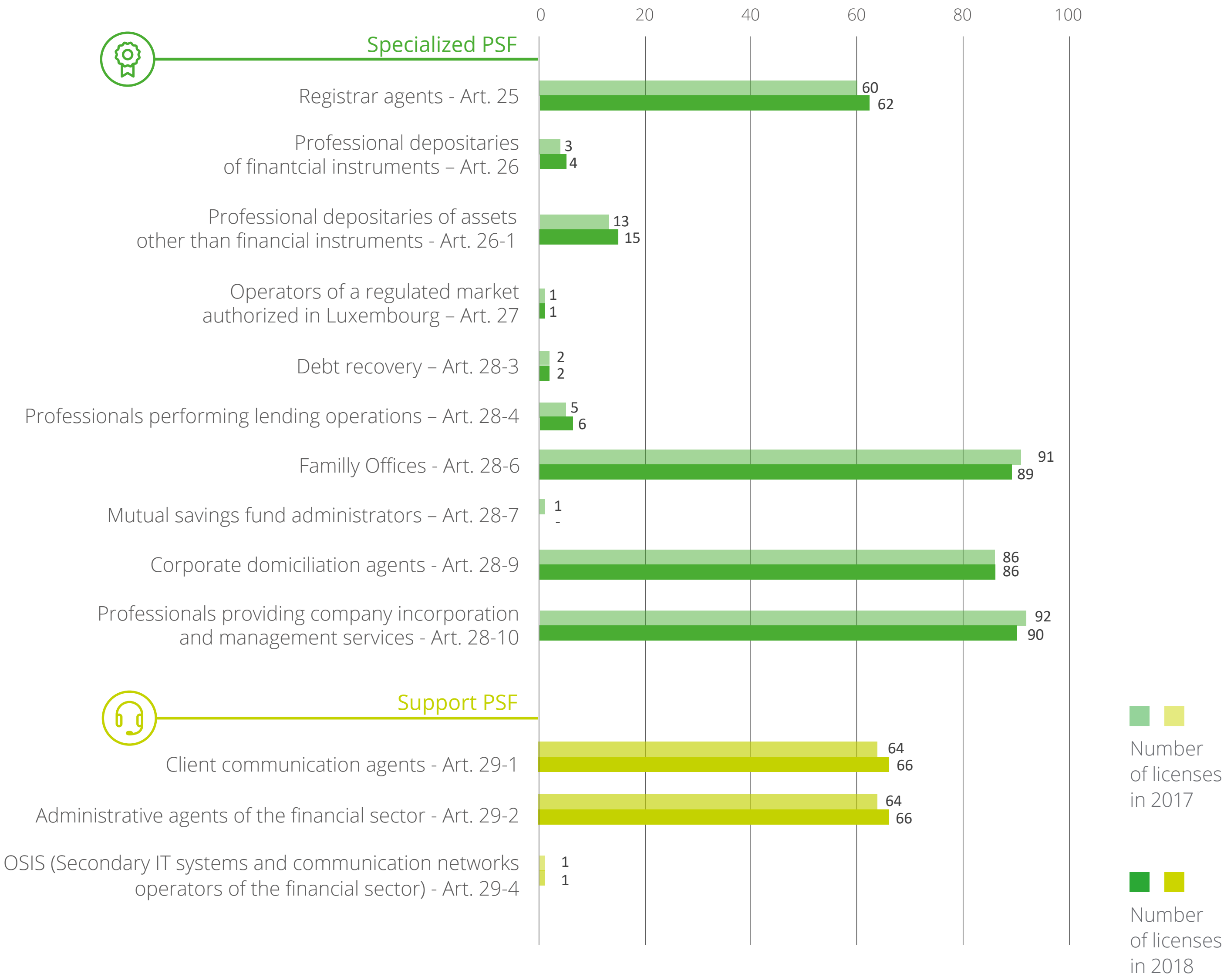
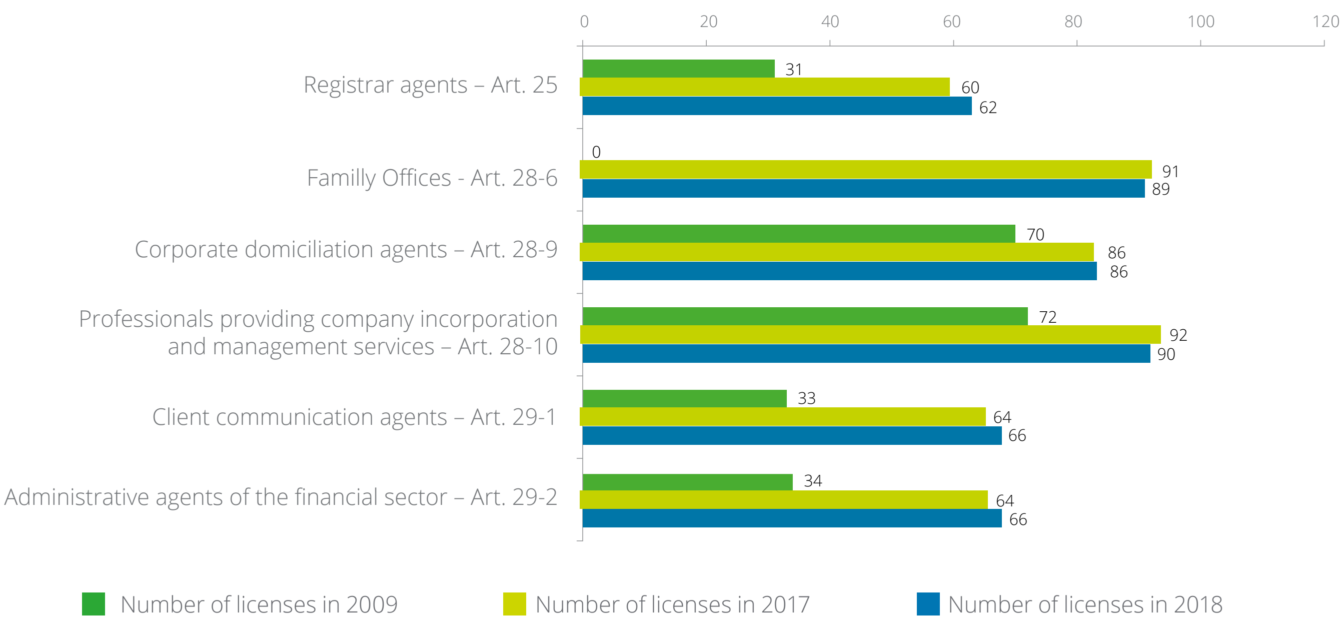


Figure 21: Change in the six main licenses held by specialized PSF as at 31 December 2018



Questions to **Christian Heinen** Managing Director of IQ-EQ Luxembourg

What changes do you expect for specialized PSF in the areas of domiciliation and central administration?
We have now moved into a phase of major change. In the past, the growth of the specialized PSF sector was linked directly to the rise in the number of structures, but in recent years quantity has declined due to new regulations and a drive to reduce the number of 'letterboxes'. Today, revenue per client is instead growing through an increasingly broad panel of services needed to navigate regulatory complexity. Greater reporting and compliance requirements means more work. The sector has also seen the emergence of alternative management organizations with more extensive needs in terms of management, administration, and custodian services. These factors have had, and will continue to have, a positive impact on the development of our sector.

Alongside this generally positive business trend, it has to be said that the market has become more competitive, with a greater number of players and much bigger structures. For example, the 'Big 4' have again moved into this sector after the wave of divestments that followed the Sarbanes Oxley Act.

This is particularly worth noting given that consolidation is continuing within the PSF sector. We would therefore have expected to see a reduction in the number of players in the market, but when you take into account law firms and other entities under OEC regulation, this is not the case.

What are the main opportunities for the PSF you represent?
The main opportunities arise as a result of constantly changing client needs. In the future, we should still be able to take advantage of growing demand for new services, particularly in the area of regulatory compliance, ESG, and corporate governance, where requirements are increasingly sophisticated.

Opportunities will also arise thanks to the ecosystem of Luxembourg as a leading international financial center. Luxembourg has always managed to turn new regulations and new client needs to its advantage, and the high standards and fierce competition here enable the jurisdiction to offer increasingly specialized services that are perhaps better adapted to the international regulatory landscape than those of other financial centers. Many therefore regard Luxembourg as "the place to be".

Lastly, the country has demonstrated relative continuity and stability in its policies while fostering and stimulating innovation—for example with the recent introduction of RAIFs, and promoting the financial center both locally and internationally through initiatives such as Luxembourg for Finance. All of these factors have major impact on the attractiveness of the country overall and of our sector in particular.

What are the main challenges facing Luxembourg for the business sector you represent?
Even though the trend is positive and the opportunities significant, some challenges still remain. To me, the biggest is the lack of local talent and the ensuing cost of labor. Some players in the financial center have already turned to outsourcing to cope with the problem.

At IQ-EQ, one avenue we are exploring is internal mobility. In the context in which the traditional sector is declining and the alternative sector is enjoying substantial growth, competencies are evolving and we believe it is important to focus on skills and expertise-sharing by encouraging internal, inter-departmental, and inter-jurisdictional mobility among our staff.

In parallel, I believe it is just as important to improve our employees' productivity through the utilization of technology. Although Luxembourg has always been innovative when it comes to developing new services in response to new regulations, this is not the case in terms of technological innovation and digitization. To me, this is the real challenge facing the sector today and the future of employment—and the development of new skills and services will depend on it.

There is one last and very specific challenge in the field of domiciliation and central administration: the growing difficulty we face in opening bank accounts for our clients within a reasonable time.

What are your expectations?
My expectations relate to the challenges I have just mentioned. Firstly, as regards digitization, initiatives taken by various players to develop skills and shared standards could be beneficial for the whole financial center. We could also consider developing cooperation with universities and the FinTech sphere. Finally, in terms of access to banking services, a wider debate is needed with engagement from all stakeholders. The situation today does not reflect the levels of efficiency and responsiveness that have built Luxembourg's reputation.

Interview by Raphaël Charlier and Adil Sebbar – 9 September, 2019

Direct tax
What happened in 2019 and what can we expect for 2020

Julien Lamotte
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What happened in 2019

Fiscal year 2019 was quite intense in term of tax changes. Most of these evolutions were driven by the international tax agenda, but not only:

- On 18 December 2018, the Luxembourg Parliament voted the transposition into Luxembourg law of the EU Anti-Tax Avoidance Directive of 12 July 2016 (ATAD 1). This law introduced new rules into the Luxembourg tax framework, as follows:
  - A limitation on interest deduction with few exceptions (i.e., a carve-out for most players of the financial sector);
  - An anti-hybrid mismatch rule covering mainly intra-EU hybrid transactions;
  - Controlled foreign company (CFC) rules; and
  - Revised exit taxation rules.

This law also amended the existing general anti-abuse rule (GAAR) to be in line with **ATAD 1**.

The topics covered by, and the provisions introduced through the law transposing ATAD 1 into Luxembourg law, apply from fiscal years that started on or after 1 January 2019, except for the exit taxation rules which will be applicable after 1 January 2020. The new law also repeals a provision in Luxembourg income tax law allowing a bondholder to convert a loan into shares in a tax-neutral manner under the domestic rollover regime.

- The good news of the fiscal year 2019 concerns **the standard corporate income tax (CIT) rate**, which has decreased from 18%, applicable for the fiscal year 2018, to 17% for the fiscal year 2019. This change to the CIT rate has resulted in an overall corporation tax rate of 24.94% (including Municipal Business Tax) for companies in Luxembourg City for FY 2019. In addition, for FY 2019, the reduced CIT rate of 15%, applicable since FY 2017 for companies with a tax base of less than EUR 25,000, now also applies to companies with a tax base of less than EUR 175,000. For companies with a tax base between EUR 175,000 and EUR 200,001, the corporate income tax charge for FY 2019 is to be EUR 26,250 plus 31% of the basis above EUR 175,000.

What can we expect for 2020

Fiscal year 2020 may follow the same trend with even more activity, challenges and changes in the tax domain. Some changes that were already in the pipeline in 2019 will come to life in 2020, and a few additional items have been announced:

- Regarding the relationship with our neighboring countries, it is worth noting that **the governments of Luxembourg and France signed a new double tax treaty** on 20 March 2018 to replace the 60-year-old agreement between the two countries. One of the most significant features of this new tax treaty that will enter into force in 1 January 2020 is the permanent establishment definition. Indeed, Luxembourg companies with activities in France can be considered as having a French permanent establishment under the new double tax treaty, even though they may not currently have a taxable presence there.

Fiscal year 2020 may follow the same trend with even more activity, challenges and changes in the tax domain.

In any event, businesses should already begin to identify transactions potentially affected by DAC 6, as the first reporting should be filed in summer 2020 and would cover a period beginning on 25 June 2018.

- In 2020, **the Multilateral Instrument (MLI)** will also begin to apply, superseding some of the provisions in existing tax treaties. The MLI is a multilateral tax convention developed to implement changes to tax treaties in line with the OECD BEPS actions. The MLI entered into force in Luxembourg on 1 August 2019. The MLI provisions will become applicable for taxes withheld at source on amounts paid or credited where the event giving rise to such taxes occurs, on or after the first day of the next calendar year that begins on or after the latest of the dates on which the MLI enters into force for the two parties affected by the tax treaty. In Luxembourg, these provisions will enter into effect on 1 January 2020. With respect to all other taxes, the MLI provisions will become applicable for taxes levied with respect to taxable periods beginning on or after the expiration of six calendar months from the latest of the dates on which the MLI enters into force for the two parties affected by the treaty, i.e., 1 February 2020 in the case of Luxembourg.

- A new tax reporting standard will also enter into force in the course of 2020, following the release on 8 August 2019, of the draft law to implement the EU directive 2018/822, the 6th change of the Directive on Administrative Cooperation, commonly referred to as **DAC 6**.

This introduces an obligation for intermediaries to disclose to the tax authorities information on cross-border arrangements that meet certain criteria called “hallmarks” and listed in the Appendices of the EU Directive. As mentioned in the draft law, information received and exchanged between tax authorities of EU member states under DAC 6 would allow those authorities to react more rapidly to potentially aggressive tax arrangements and to address potential loopholes by conducting appropriate risk assessments and tax audits, or involving legislative reforms aimed at closing such loopholes. In any event, businesses should already begin to identify transactions potentially affected by DAC 6, as the first reporting should be filed in summer 2020 and would cover a period beginning on 25 June 2018.

- ATAD 1 was only the first step, and the anti-hybrid rule will be changed and broadened with the implementation into domestic law of the EU Anti-Tax Avoidance Directive 2017/952 (**ATAD 2**). The draft law was released on 8 August 2019 and should be voted by year-end 2019. ATAD 2 extends the anti-hybrid provisions of ATAD 1 to hybrid mismatches with countries outside of the European Union and covers additional types of hybrid mismatches.

- Last, but not least, the draft Budget law released on 14 October 2019 includes a small but important change to the general law regarding the validity period of **advance tax rulings** issued before 1 January 2015. Rulings issued before 1 January 2015 are currently valid without any time limit, as long as the decision complies with the legislation in force and there is no change in the fact pattern. The draft budget law intends to introduce a new §29b into the Luxembourg General Tax Law providing for the expiry of all advance tax rulings issued before 1 January 2015 by end of fiscal year 2019. The purpose of this rule is to align the regime of older rulings with those issued since 1 January 2015. Taxpayers can introduce a new request if need be (and to the extent that they meet relevant conditions).

Key trends in the transfer pricing landscape in Luxembourg

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Fundamental changes to the international tax landscape arising from the Base Erosion and Profit Shifting (BEPS) Action Plans have put transfer pricing (TP) under an universal spotlight. What was once a small specialism within international taxation, has now become one of the most challenging aspects for Heads of Tax and CFOs. This is all the more true for Luxembourg given its leading position in the financial services sector, and the concentration of cross-border activities. In this article, the authors take a closer look at recent developments in Luxembourg's TP landscape and its impact on the financial services sector.

The increasing importance of transfer pricing in the financial services sector

From a legal perspective, transfer pricing in Luxembourg finds its origins in December 2016, where Luxembourg amended its tax code by making an explicit reference to the arm's length principle in its income tax law. In the years following, Luxembourg made efforts to align its legislation and transfer pricing practices with Action 8-10 of the BEPS Action Plans.

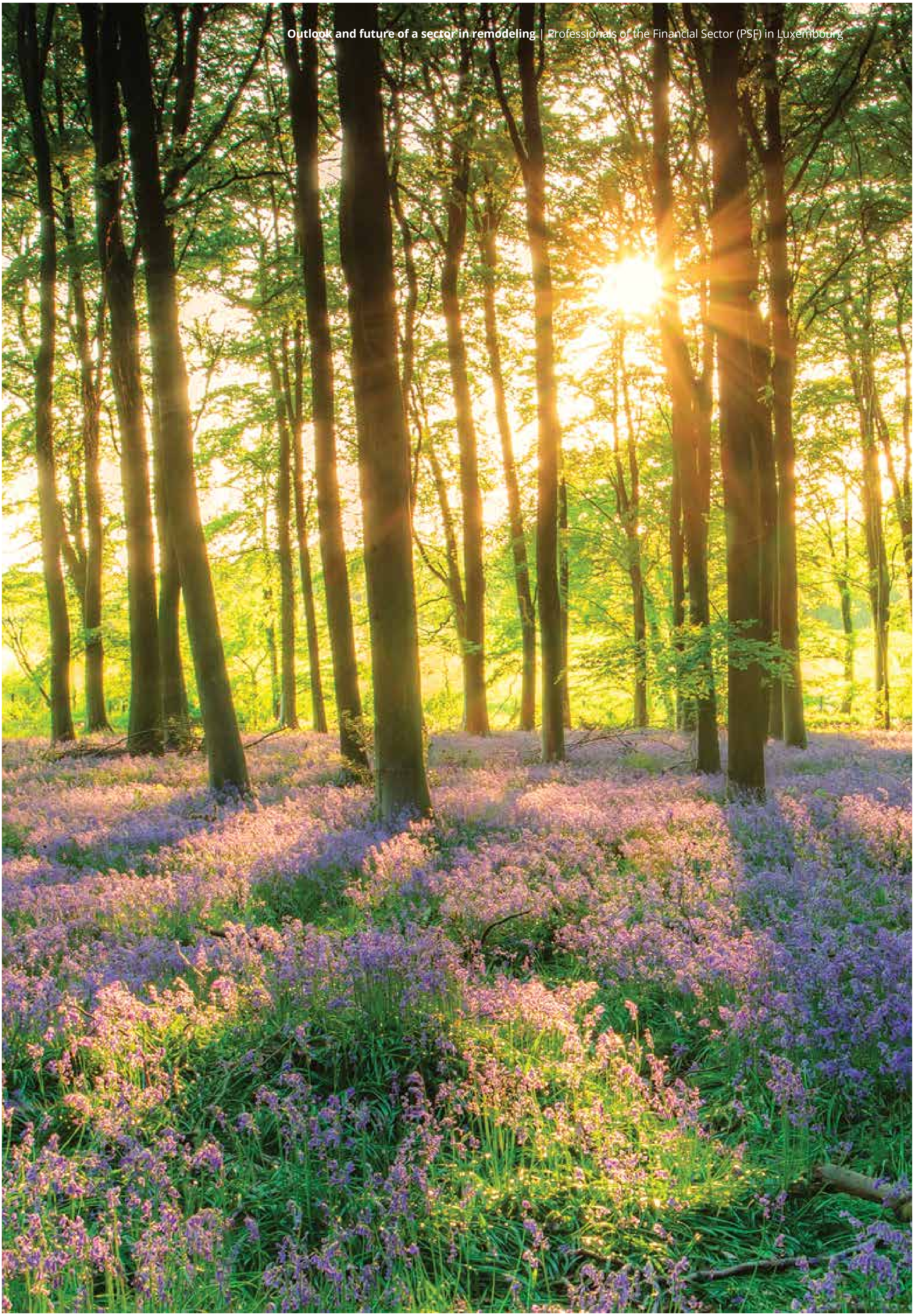
Some of the key themes triggered by the BEPS initiative concerns the defensibility of existing TP approaches. One example within the financial services sector is the application of one-sided approaches within the asset management industry whereby one party will retain the residual income after remunerating related parties for the performance of delegated functions. Under a two-sided approach, the residual income will also be split depending on the value contribution by each of the related parties involved in the production, management, and distribution of funds. The latter approach is likely to reflect the spirit of the OECD BEPS initiative more accurately by allocating profits along the value chain based on economic activity and value creation. There is a lot of discussion about the future of TP in the financial sector. It is a relatively new area of focus. Only recently, tax authorities in different jurisdictions have started to scrutinize more closely transactions in the financial services sector, and as they are gaining more experience, it is expected that this trend will continue over the coming years. What is more, in addition to the tax dimension, financial regulators such as the Commission de Surveillance du Secteur Financier in Luxembourg and the European Banking Authority or European Securities and Markets Authority, have also started to focus on TP, probing existing policies, agreements, and documentation as indicators for proper management of regulated entities. Overall, both at the Luxembourg and global level, transfer pricing is increasingly gaining importance within the sector.

Main transfer pricing developments to take into account for 2020

- Tax controversy can be considered as one of the greatest upcoming challenges for taxpayers within the financial services sector. Given the strong regulatory dimension of the sector, centralized operating model are widely applied: based on a delegation model, there is one regulated entity (e.g. Luxembourg) that engages with a number of related and unrelated parties in different jurisdictions. However, consequently in case of any tax controversy, the centralized entity would need to reconcile the outcome of any foreign-triggered tax assessments. The reconciliation can have a big impact on the group given the amount of jurisdictions involved and the interests at stake. For these reasons, and given the renewed focus of tax authorities on financial services, tax controversy should be high on the agenda of the taxpayer.

- In line with the first point, tax governance has become essential for taxpayers to address potential tax risks upfront to avoid an increase in the number of tax audits and subsequent controversies. Using the example of the centralized operating model again, it is paramount to ensure that the key entities are sufficiently integrated, in particular with respect to setting the transfer price, preparing the documentation, and managing potential tax audits/controversies.

- Another transfer pricing development in the financial services sector is the growing reliance on intangible assets. Nowadays, the use of technology goes beyond the development of software and covers now mobile applications, data analytics, smart contracts, and machine learning among others. From a transfer pricing perspective, the widespread use of intangibles poses two main challenges, namely the recognition of the intangible asset and finding the arm's length remuneration.



2019 VAT: In the rear-view mirror and on the radar

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In the rear-view mirror: the VAT group

In 2018, the most important VAT change in Luxembourg was, without a doubt, the introduction of the VAT group regime. From 31 July 2018, Luxembourg established that persons who are legally independent but closely linked from an economic, financial and organisational viewpoint are allowed to form a VAT group and become a single taxable person for VAT purposes. This implies that all supplies between these persons, whether goods or services, are not subject to VAT. This is an important move for the numerous businesses that perform exempt financial services and were not, or only partly, able to recover VAT incurred on their costs. This therefore allows companies of a same group to centralize activities and share resources without suffering an additional VAT burden. The introduction of the VAT group was motivated by the September 2017 decisions of the Court of Justice of the European Union (CJEU) preventing operators other than NGOs from being part of an Independent Group of Persons (IGP). The IGP has a similar effect to some extent to that of the VAT group (allowing VAT-free transactions between persons involved) but based on very different technical rules. The first reactions indicate a strong interest in this new regime from economic operators. This is, of course, the case for those who were using an IGP regime before the Court's decisions, but not only. It is true that some find that the regime might be complex to set up and to run on a daily basis. This is rather surprising, considering the efforts that the Luxembourg authorities (and professional associations involved) have made to anticipate these difficulties, by making the most of the experience of Member States that have already implemented this regime. Practicioners and businesses will remember that the implementation of the IGP regime in 2004 attracted similar comments. The number of IGPs that existed in Luxembourg before the 2017 decisions perfectly illustrate that experience helps to solve such difficulties and that the success of a tax regime should be measured over a longer period.

On the radar: future CJEU decisions and EU FS VAT review

Using past experience is important, being aware of potential changes also. We should therefore also mention two decisions filed with the CJEU by the UK VAT authorites in March 2019. The first one concerns the VAT treatment of "automated assistance services to the portfolio management" or "Aladdin" services provided by BlackRock US to BlackRock UK. The UK First-tier Tribunal and Upper tribunal considered that those services could qualify as exempt management services for investment funds, pursuant article 135.1.g. of the EU VAT Directive (article 44.1.d of the Luxembourg VAT law). However, the Upper Tribunal referred to the CJEU the question of the apportionment of these services when used, on the one hand, for investments funds and VAT exempt, and, on the other hand, for other clients and therefore taxable. The impact that the Court's decision in this case may have on the financial industry is obvious. The other case, United Biscuits, concerns the possible application of insurance exemption management services to a defined benefit (DB) pension scheme, which, at the difference of defined contribution (DC) pension schemes, are not eligible to the fund exemption. Due to the limited number of DB schemes in Luxembourg, the question may appear anecdotal. However, the Court may surprise us and develop principles that might have a broader impact than this limited question. We can expect the Court's decisions at the earliest before its 2020 summer break or during the last quarter of 2020.

We should also mention that the Juncker Commission appointed a consortium of consultants to conduct a survey regarding the impact of the VAT exemption of financial services (including fund management and insurance services). The results of the survey, expected for the second half of 2020, would help the new Commission to decide whether or not to undertake a review of these exemptions. This consortium is consulting with European and national associations, national VAT authorities, and businesses. Whether or not to recover VAT incurred on costs, charge VAT to consumers (who can or cannot recover VAT), being able to in/outsource services with or without VAT; these are important matters for all the economic operators involved, and may affect their business models. We can expect that the different stakeholders and Member States involved will have diverging or even opposite points of view. As often for tax, "one size does not fit all".

2.4 Support PSF

Just like specialized PSF, support PSF do not have the benefit of a European passport. A quarter of these entities are local and are not part of a group. In a few isolated cases they belong to banks, but the majority belong to specialist IT groups (such as Xerox, IBM, HP, Tata, Atos).

Our analysis shows that two main licenses co-exist in this category:

The first group includes client communication agents under Art. 29-1 (32 entities at year-end 2018 and 37 entities at year-end 2017), coupled in 44% of cases with Art. 29-2 as financial sector administrative agents (16 entities at year-end 2018 and 16 entities at year-end 2017). Administrative agents are automatically authorized to carry out activities as client communication agents.

The second group includes 57 IT PSF under Art. 29-4 as OSIS (61 at year-end 2017) which are supplemented:

- In 34 cases by OSIP licenses (Art. 29-3). OSIP (Art. 29-3) are automatically authorized to carry on OSIS activities (Art. 29-4)
- In 16 cases by licenses under Art. 29-1 and 11 cases by licenses under Art. 29-2.

The third group includes providers of dematerialization services of the financial sector (Art. 29-5) and of conservation services of the financial sector (Art. 29-6). At year-end 2018, two PSF simultaneously held both of these licenses, against one in 2017 and 2016.

The number of licenses held by support PSF has decreased from 152 in 2017 to 143 in 2018.

Figure 22: Distribution of support PSF licenses as at 31 December 2018

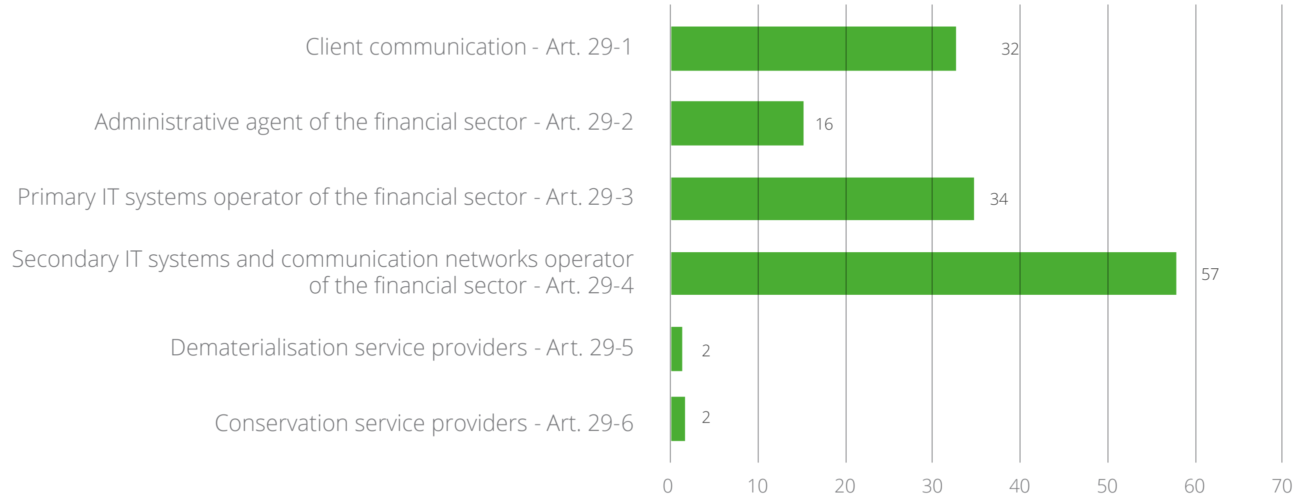
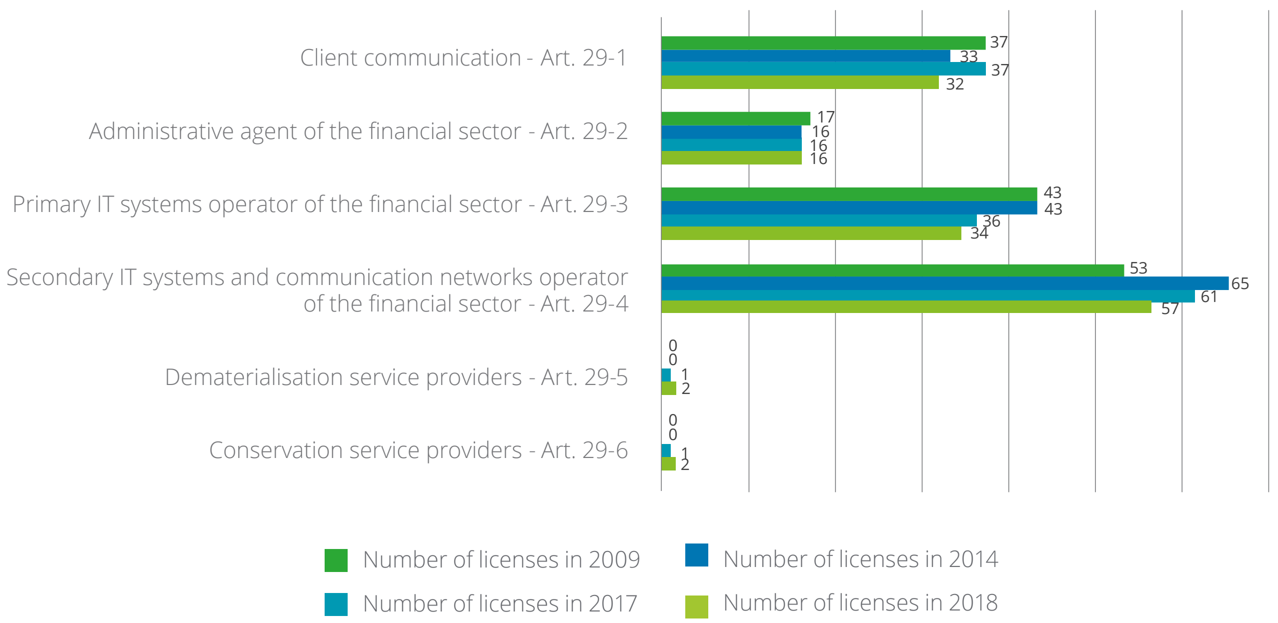


Figure 23: Change between 2018, 2017, 2014 and 2009 of licenses granted to support PSF



Questions to **Patrick Kemper** Country Director, Ricoh Luxembourg.

What changes do you expect for wealth managers?
Given the current draft of regulatory changes, the Support PSF status is destined to disappear, or to survive through only a handful of dinosaurs.

However, if we do not want to lose this "national heritage" that we have built over the past 15 years, the license must be completely overhauled in order to modernize and adapt it to the new needs of local and international markets. In other words, we must turn it into a sort of "standard", with more substance and value, which is recognized not only locally, but also abroad. Certified entities in Luxembourg could then offer unique, high value-added services across Europe out of the Luxembourg marketplace.

To achieve that, we must expand its scope in order to integrate Fintech and insurance companies. It must be pragmatic, agile, and flexible so that it can adapt to the digital transformation and the new needs that this will bring in the coming years, such as virtual currencies, artificial intelligence, and robotics.
If our sector is capable of analyzing and capturing new market needs, while using the many skills we have gained over the past decades, we will be able to deliver new kinds of services, with high added value, for new types of clients (especially 4.0 digital era banks, insurers, Fintechs, and the financial sector overall).

Jean-François Terminaux, Chairman of Finance & Technology Luxembourg stated we must also review certain practical aspects today, such as:

- aligning legislation between Banks and Support PSF
- simplifying certain banking-style requirements to which Support PSF are also subject
- reviewing financial constraints applicable to Support PSF
- adapting contracts to specific needs
- minimizing red tape.

What are the main opportunities for Support PSF?
There were numerous opportunities for certain Support PSFs in the past. They particularly depended on the kind of services they offered the financial world (especially banks and other PSF categories such as private portfolio managers, corporate domiciliation agents, and fund administrations). The IT world was clearly the one to benefit from them most. The creation of this license was a real success, both for Support PSF and other players in the financial sector who gained by it.

There is no doubt that the deal will change after the introduction of new regulations, but I am still convinced that the 2.0 version of Support PSF will bring new opportunities for both longstanding and new players (Fintech and insurance companies, etc.). Luxembourg is capable of being creative, but it sometimes gets ahead of the market. We could take the example of the PSDC status (Dematerialization or Conservation Service Providers) which suffers from a market that is still lacking maturity. However, with the changes the digital transformation will bring, the benefit of this kind of services should soon become apparent.

Obviously, the picture is not so rosy for all Support PSF, because even if the license is justified by the type of services they provide, we must not forget that a financial client is under no obligation to use a Support PSF. Future opportunities will therefore depend on political will to move towards a more or less regulated situation.

What are the main challenges facing Luxembourg for the business sector you represent?

The challenges are numerous, varied, and can have significant consequences depending on the business of the Support PSF in question. The Chairman of Finance & Technology Luxembourg, Jean-François Terminaux, clearly explained this in an interview with PaperJam when he said: "2020 will be an important year for Support PSF."

For my part, in the short-term, these challenges remain fundamental: (i) we must understand and interpret the new regulatory changes, whether they are local or European (which is generally no mean feat); (ii) we must assess their structural, organizational, compliance, and financial impact on any local entity, and for Support PSF that belong to a group, on the parent company too; (iii) we must be capable of evaluating the constraints for our business models and decide whether they should be adapted in order to remain profitable, compliant, and competitive compared to the non-regulated market.

Allow me to recall the examples Jean-François Terminaux gave:

- the adoption of the new finance law at the beginning of 2018 and especially article 41: "It is true that, once they have obtained their clients' consent, financial sector businesses are no longer under any obligation to use a Support PSF to outsource their services, be it inside the country or elsewhere. However, I should emphasize that the law does not specify the nature of this consent (i.e. whether it is implicit or explicit) and each financial sector player must therefore decide how to obtain it, at least until the courts have provided the answer."

- The CSSF cloud circulars, and particularly Circular 19/714 (formerly 17/654) and the guidelines of the European Banking Authority (EBA) have laid down clear rules governing the use of cloud-based services for financial players. Once again, these new rules must be taken into account in the services that Support PSF provide to their clients. The new EBA guidelines and the new Circular also clarified the scope within which a Professional of the Financial Sector must be used. On this basis, the principle of 'always via a PSF', which has been the standard practice in Luxembourg since the 2003 Law, is definitely a thing of the past. It is the service that matters, not the nature of the financial institution's activity. As a result, a whole series of services for banks are no longer exclusively governed by the PSF license (a cleaning company being one simple example).

In the medium-term, if we are to stay in the race, the main challenge will consist of modernizing the status of Support PSF so that they retain their legitimacy locally, and gaining international legitimacy in an increasingly digital Europe where there are fewer and fewer borders, but which will no doubt need more and more regulation. Support PSF are subject to many regulatory requirements which, in some cases, can be an obstacle to selling services and a disadvantage compared to competitors that are not subject to the same legal and regulatory demands. Opportunities are also lost as a result of outsourcing (sometimes with a ripple effect) at our clients' parent companies. Even though we must not forget that regulations have also helped us acquire our skills, those regulations must nonetheless be adapted to the reality of the market to allow us to be more agile and responsive to change. We are not banks, and we are not necessarily exposed to the same kinds of risks. I believe there is a lack of coherence between the certifications obtained by certain Support PSF (such as ISO 9001 and ISO 27001), and the level of supervision.

What are your expectations?

Our government must absolutely realize the role that IT PSF Support PSF play in Luxembourg's ecosystem and the difficulties that PSF (including Support PSF) are facing and will continue to face in the years ahead. The government must be aware that Support PSF are local players who have brought value and know-how to the financial sector in Luxembourg. This realization would appear to be taking place in light of the mission to modernize the status of Support PSF initiated by the High Committee of the Financial Centre in response to the changes in regulatory framework and market developments.

I hope the government will continue down this path so that this PSF status, which is currently a real added value for a number of Support PSF, can continue to be and will also be for the new firms that join us in future.

Interview by Raphaël Charlier and Adil Sebbar –3 October, 2019

Resilience against ransomware attacks

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In recent years, ransomware and phishing have become the most rampant form of cybercrime and an exponentially increasing cyber-threat to organizations. The former is a type of malware designed for the sole purpose of extorting money from victims, while phishing is the delivery mechanism of choice for such malware. Despite the dangers, the good news is that there is a lot you can do about it to be prepared and resilient against such cyber-threats.

Ransomware attacks—a growing epidemic

Are you prepared to face the evolving threat of ransomware?

Ransomware is a type of malicious software that restricts or limits users of a targeted organization from accessing their IT systems (servers, workstations, mobile devices, etc.), until a ransom is paid. It is a major and growing threat that organizations will certainly face if they are not already concerned.

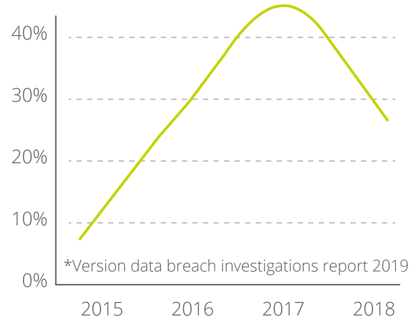
We have learned from the various ransomware incidents that have happened in the last four years that organizations may not be as prepared to face such a threat as they believe.

Ransomware can have an overwhelming impact on businesses of all sizes, across all industries. Personal and corporate data, financial and healthcare records, network share files (hosting sensitive employee data, intellectual property or customer data), and all other valuable content can be taken hostage. The latest ransomware aftermath stories are proving that it can halt businesses, slow down productivity, and, potentially, set an entire organization up for failure.

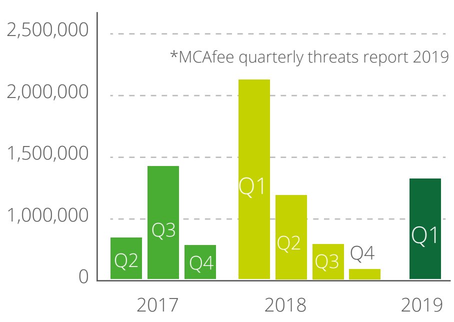
Ransomware prevalence within malware

In 2018, cybercriminals have been resorting to using compelling data as a weapon for coercing victims into paying up. With Ransomware-as-a-Service (RaaS) still being offered in underground forums, along with Bitcoin as a secure method to collect ransom, cybercriminals are being all the more drawn to the business model. In the first quarter of 2019, ransomware attacks grew by 118 percent, new ransomware families were detected, and threat actors used innovative techniques. McAffee[1].

Ransomware prevalence within malware



Growth of Ransomware attacks



1 McAfee Labs Threats Report, August 2019. Available at: https://www.mcafee.com/enterprise/en-us/assets/reports/rp-quarterly-threats-aug-2019.pdf

Furthermore, the same report shows that the financial industry is among the top 10 targeted sectors by ransomware for the period 2018-2019.

Ransomware campaigns such as WannaCry, Petya, NotPetya, and many other more recent ones such as Dharma, GandGrab and Ryuk (most active during the first quarter of 2019) have led to significant financial losses and reputational damage for companies worldwide. Luxembourg has also been targeted in the past year by crypto ransomware campaigns such as the CTB-Locker or Critroni crypto ransomware. These propagate mainly through spam messages and email attachments and was reported in 2018 by the Computer Incident Response Center Luxembourg (CIRCL), the CERT for the private sector, communes, and non-governmental entities in Luxembourg[2]. Considering the booming FSI sector and the fact that ransomware is mostly a financially motivated attack, Luxembourg remains a lucrative target for threat actors.

Phishing is the number one delivery vehicle for ransomware
Phishing is the attempt to obtain sensitive information such as usernames, passwords, and credit card details (and, indirectly, money), often for malicious reasons like executing and propagating malicious content by being disguised as a trustworthy entity in electronic communication.

Phishing emails are easy to send and lead to a faster return on investment (ROI) for the cyber-criminals. Phishing, as part of social engineering schemes, lures victims into executing actions without realizing the malicious drive. The less aware the targeted user is, the more fruitful the attack. Likewise, in case of targeted attacks, phishing emails are created to look like they come from a trustworthy sender, but link to or contain malicious content that executes as soon as users click it, encrypting their data and asking for the ransom. Sophisticated phishing attacks are harder to detect by nature and sometimes even careful users can still fall into the trap.

2 https://www.circl.lu/pub/press/20150205/

Phishing is so successful today since users are experiencing an "infobesity" through their received emails, making them less cautious to detect phishing attempts. Cybercriminals are resourceful when deceiving users by crafting content and evading detection patterns (customization of content, copy of graphical charter, etc.).

Cybercriminals also take advantage of the information users share about themselves through social media, to create tailored and more authentic email templates. Users may receive insufficient training about phishing, its use to deliver ransomware, and the best practices to deal with unknown threats. In addition, many users are simply not sufficiently skeptical when it comes to receiving requests to do things like transfer funds, open attachments, or provide sensitive information. Even worse, some organizations are not considering the inclusion of user training and awareness as part of their defense strategy.

How can you protect your business from ransomware?

Rethink your protection against ransomware
Traditional protection methods relying on malware signatures and basic rules for protection has revealed to be ineffective against ransomware threats. Attackers design their ransomware to bypass traditional web and email protections, which may be prone to "set-and-forget" configurations.

The ransomware threat should be handled with a comprehensive assessment of the organization's controls and capabilities to understand if they are really capable of responding to the latest threats. This assessment includes, but is not limited to the following:

- User awareness
- Established guidelines, policies, and procedures for protecting sensitive data on corporate computers and mobile devices
- Backup and recovery strategies
- Vulnerability and patch management processes
- Use of privileged accounts and access controls
- Multi-layered endpoint security, network security, encryption, and strong authentication and reputation-based technologies
- Incident response processes
- Use of threat-intelligence solutions
- Retainer with a third-party expert to help manage crises.

Define your phishing defense strategy:
Without a phishing defense strategy, organizations are prone not only to the ample phishing emails used to deliver ransomware, but also to the less observable emails used to deliver the same malware that has been used for years.

By preparing for these phishing attacks, users can be empowered to act as both 'human sensors' for spotting phishing attacks and 'partners' in thwarting threat actors from gaining a foothold within your organization.

Organizations should implement a strong security awareness program that will help users to make sound decisions about the content they receive through email, on what they view or click in social media, how they access the web, and so forth. It is essential to sufficiently invest in employee training so that the human firewall can provide an adequate first line of defense against increasingly sophisticated phishing and ransomware.

Finally, you should regularly assess your employees' and end-users awareness via phishing simulation campaigns. For instance, awareness programs such as Deloitte's Phishing as a Service including highly customizable simulation and response components are generally more effective than merely walking users through theory without any practice.

Can ransomware incidents entail legal ramifications for the financial sector?

The General Data Protection Regulation

Ransomware poses a threat both to the availability and the confidentiality of the FSI actors' data and systems. Furthermore, ransomware attacks, especially those ending in 'data dumps' (public disclosure of the data) of personal data of customers and/or internal staff, can fall under the GDPR definition of personal data breach defined as "a breach of security leading to the accidental or unlawful destruction, loss, alteration, unauthorized disclosure of, or access to, personal data transmitted, stored or otherwise processed" (Article 4 (12)). As a result, FSI actors may suffer not only reputational damage, but also face legal consequences and deal with financial losses due to the administrative fines of up to €10,000,000 or up to 2 percent of the total worldwide annual turnover of the preceding financial year (Article 83(4)).

Network and Information Systems (NIS) Directive

The Directive (EU) 2016/1148 (hereafter NIS Directive) defines an incident as "any event having an actual adverse effect on the security of network and information systems" (Article 4, NISD). Moreover, the Directive defines the Operators of Essential Services (OoES) which comprise public and private entities responsible for the maintenance of critical societal and economic activities—among which are banking and financial market infrastructures.

OoES are obliged under Article 14 to take "appropriate and proportionate technical and organizational measures to manage the risks posed to the security of network and information systems" and to notify "without undue delay" the national competent authorities or the CSIRT for incidents in the concerned sector (CIRCL for the private sector in Luxembourg) if an incident has a significant impact on the continuity of the essential services they provide. The significance of an impact is determined based on:

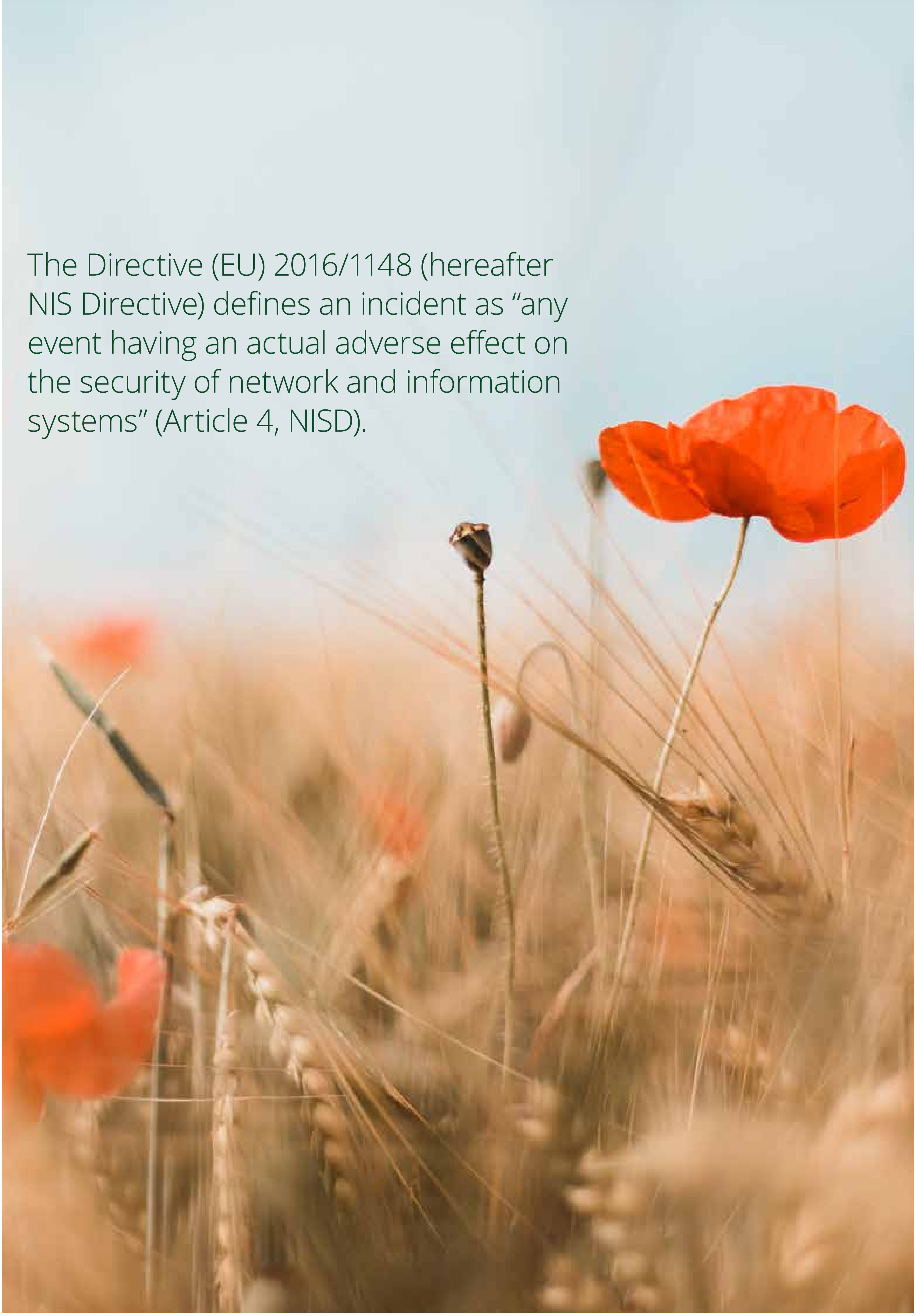
a) the number of users affected by the disruption of the essential service
b) the duration of the incident
c) the geographical spread with regard to the area affected by the incident.

The Luxembourg Law of 28 May 2019 transposing the NIS Directive appoints the Commission de Surveillance du Secteur Financier (CSSF) as the National Competent Authorities (NCA)[3] for banking and financial market infrastructures sectors. As such the CSSF is responsible for identifying the list of OoES and provide further clarifications of "undue delay" and other details of the incident notification procedures[4] *(in progress)*.

http://legilux.public.lu/eli/etat/leg/loi/2019/05/28/a372/jo

https://www2.deloitte.com/lu/en/pages/risk/articles/nis-directive-first-cybersecurity-law-luxembourg.html

The Directive (EU) 2016/1148 (hereafter NIS Directive) defines an incident as “any event having an actual adverse effect on the security of network and information systems” (Article 4, NISD).



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Deloitte's proposed services

Over many years, Deloitte has developed its competencies and services to support and advise all types of PSF over the various stages of their development, providing the following services before incorporation and throughout their existence and growth.

Upon creation

Regulatory strategy	• Assistance in compiling License application documents and submissions to the CSSF • Gap analysis and assistance in establishing a set of procedures covering all administrative aspects and internal controls
Strategy & Corporate finance	• Business plan services including reviews of different scenarios, possibilities of subcontracting administrative and accounting organization, etc. This business plan is an integral part of the CSSF License application file
Direct taxation & VAT	• Design an efficient and customized tax structure based on the business plan and the specific Licenses • Fiscal optimization from the beneficiaries' perspective • Assistance in matters related to direct taxation & VAT • Due diligence
Technology & Enterprise application	• Design of the IT strategy (as part of the file to be submitted to the CSSF)
Business Risk	• Develop feasibility study & market entry strategy • Draft business case and initial organization, operations and high level IT capabilities assessment • Refine/confirm strategy including business model and commercial strategy (i.e. products, activities/ services and targeted clients) • Design governance structure • Draft the business plan (covering 5 years), including key financials, Opex and Capex, regulatory ratio calculation and scenario analysis • Analyse the compliance with regulatory requirements • Describe the products and services • Draft required policies (i.e. risk management, compliance, AML, internal audit) • Draft the IT & IT security section • Compile the application file and appendices to be submitted to the CSSF • Definition and implementation of policies and processes • Draft procedures (operational and regulatory) • HR recruitment • Implementation of IT systems • Propose our systems, such as uComply for AML checks • Accounting & regulatory reporting configuration • Introduction, selection, negotiation with third party providers

During the development stage

Regulatory strategy	• Administrative and accounting organization, and review of the compliance of services offered to clients in line with the requirements of the CSSF, in particular review the compliance with CSSF circular 12/552 (gap analysis, training, implementation) • Procedures manual covering the following aspects: administrative, IT, accounting, internal controls, etc. • Proposing compliance tools such as uComply • Rules of conduct in line with best practice of the financial centre and MiFID rules • Training in all the above areas • Assistance in relations with the authorities • Provision of a regulatory hotline • Within the framework of subcontracting, inventory of services to be provided and drafting of Service Level Agreements (SLA) • Support for regulatory intelligence • Digital strategy
Governance, risks & compliance	• Subcontracting or co-sourcing of the internal audit function • Advisory services for the definition of relations with third parties and suppliers, and definitions of the corresponding risks • ISAE 3402 and SSAE 16 • ISAE3000 • Regulatory Health Checks • Assistance on regulatory compliance obligations • Assistance in developing internal control plans (Risk Management, Compliance Monitoring Programme • Assistance in building the governance model • Compliance Risk Assessment (CRA) • Training in internal control functions
Forensic & AML	• Appropriate organization to deal with money laundering and the financing of terrorism in terms of training and raising awareness, client knowledge, structuring and procedures • Assistance in selection and implementation of anti-fraud and AML systems • Targeted investigation and due diligence
Financial risks	• Calculation and optimization of solvency ratio, production of CoREP reporting and regime relating to broad exposure • Advice, analysis and assistance regarding establishment of the ICAAP • Implementation of a framework for liquidity monitoring and monitoring of Basel regulations, in particular in respect of the advanced method relating to operational risk • Development of quantitative models relating to credit, market and operational risks • Provision of training in all the above areas • Assistance with the set-up of finance operations • Finance diagnostics and improvement of financial reporting processes • Internal control remediation • Assistance with the selection and implementation of accounting software • Accounting diagnostics workshops to enhance the closing process
IT risks (Information Technology)	• One-off advice on long-term implementation, support in terms of IT strategy, review of IT architecture, implementing solutions, IT integration and optimization • Assistance with all IT projects in terms of banking secrecy, relations with authorities and subcontracting • Business Continuity Plan and Disaster Recovery Plan • Projects and assistance in IT security (Security governance, risk management, ISO27001 implementation and cyber-security) • IT audits and IT investigations Forensic, eDiscovery and Data Analytics • Assistance on compliance with the data protection law
Strategy & Corporate finance	• Assistance in terms of external growth (merger, acquisition, strategic alliance) • Due diligence • Evaluation of PSF • Business Model Optimization • Client and market strategy review • Executive search and coaching"
Capital markets and financial assets	• Valuation review and independent valuation of complex financial instruments • Coverage of current applicable valuation procedures • Examination of the valuation model used • Review of market data input into the valuation model
Human resources	• Organizational transformation of the HR function • Definition of HR TOM (Target Operating Model) • Career and succession plan management and development • Performance management and compensation system modelling • Recruitment and skills assessment of specialized profiles • Implementation of HR information systems and portals • Change management • E-Learning / Face-to-face Learning / DLearn offer
IMS (Investment Management services)	• Modular assistance in all issues relating to cross-border financial product distribution networks (registrations; tax reporting, risk, solvency, etc • Investment policy: review of monitoring systems for investment policies and valuation, support for complex financial instruments, assistance in • Designing new products and investment strategies, as well as advice and assistance on the aspects of UCITS V or AIFMD • Corporate governance: advisory services for setting up a code of conduct and assistance with the selection of service providers and domiciles

Accounting	• Implementation of new accounting laws and standards • Analysis of complex accounting treatments under different GAAPs • Provision of accounting opinion based on analysis of transactions under different GAAPs • Assistance with transition from one GAAP to another • Review of Financial Statements for compliance with accounting laws and standards • Provision of external training sessions on accounting laws and standards • Creation of e-learnings under IFRS • Accounting and finance function outsourcing • Support with accounting expertise in the context of mergers and acquisitions, carve-outs or listings • Account reconciliation
Direct taxation & VAT	• Assistance with tax returns (IRC [corporate income tax], ICC [municipal business tax], IF [wealth tax], withholding tax, VAT) • Ad hoc tax advice on direct taxation and VAT • Customized fiscal assistance and optimization analyses when creating the operational structure • Assistance with the tax aspects to consider in the context of operating procedures and assistance in introducing manuals of procedures taking account of the applicable tax framework and its evolution • Assistance in respect of transfer pricing • Verification of practical aspects of tax residence • Optimization of profit distribution to shareholders • Operational assistance (also in respect of problems linked to the EU Savings directive, FATCA, the exchange of tax information (CRS), tax treatment of investors, QI etc.) • Tax reclaim for private clients • Until the termination of operations • Evaluation of the fiscal structures of the clients • Due diligence • Personalised training and tax hotlines • Assistance on tax optimization of the salary package of directors • Evaluation of the impact of BEPS on the client portfolio
Business Risk	• Training on regulatory requirements • IA outsourcing • Hot line on risk and regulatory subjects • HR support • Ongoing Corporate, VAT and personal Tax consulting • Any other support as required in each specific case • Attest services for non-financial information (ISAE 3000, ISRS 4400) • Certification of compliance with regulatory frameworks, guidelines or laws • Validation of training costs (INFPC) • Attest services for non-financial information (ISAE 3000, ISRS 4400) • Certification of compliance with regulatory frameworks, guidelines or laws • Validation of training costs (INFPC)
Private Wealth Services and Family Office	• Support and implementation of customized financial structures for private clients (sales of companies, international transfer of assets, transfers of residence, etc.) • Family and corporate governance • Financial strategy and compliance • Development of specific vehicles and products (philanthropy, art funds, Islamic finance, etc.)
Technology & Enterprise application	• Define a director plan • Implement the director plan • Define and establish an IT governance • Design a sourcing strategy • Selection of packages • Application development and maintenance • Define and implement analytical solutions
External audit	• Audit of company accounts • Review of compliance with circulars and preparation either of analytical audit reports (for investment firms), or compliance reports (for specialized and support PSF) • Consultation on regulatory and accounting issues, conversion to IFRS, agreed procedures and other normative aspects • Support relating to requests made by the CSSF • Certification of continuous training records in order to obtain related subsidies

Until the termination of operations

Forensic & AML: Liquidation services	• Assistance in setting up liquidation plans
Direct taxation & VAT	• Tax advice and assistance in connection with a liquidation, merger, demerger or transfer • Fiscal assistance with regards to the beneficiaries • Communication with the tax authorities
Business Risk	• General support during the withdrawal process and in particular in analysing the technical subjects addressing the specific requirements in terms of: – Human resources – Regulatory aspects (capital, governance, IT security etc.) – IT & Operations – M&A and valuation – Tax & VAT
Technology & Entreprise application	• IT transition management

4 Useful addresses

Organizations representing PSF

Expanding representation across professional associations

PSF are subject to the supervisory authority of the CSSF. Holding the PSF status is subject to a license granted by the Minister of Finance, in consideration of the opinion given by the CSSF. The conditions for granting such a license include in particular initial capitalization, credit standing, the competence of the management and adequate governance, relying on a central administrative office based in Luxembourg.

The professional associations set out below are the most representative in terms of defending the interests of PSF:

Finance & Technology Luxembourg (FTL)
This association, formed in 2007, currently combines over 50 companies providing services to financial institutions. The mission of the association's platform is to inform its members about changes in prospects for the professions in question, create synergy between players with a view to securing Luxembourg projects with an international dimension. It also proactively handles current topics related directly to support PSF and FinTech companies.
Tel : +352 43 53 66 – 1
www.financeandtechnology.lu

Association Luxembourgeoise des Family Office (LAFO)
This Luxembourg professional association has about fifty members and is specialized in Family Offices. The Family Officer serves as a service provider for 'families and asset entities', i.e. it coordinates, controls and supervizes all professionals involved in the provision of services to its clients (asset management, attorneys, tax advisers, banks, trustees, notaries, etc.).
Tel: +352 621 135 933
www.lafo.lu

Association Luxembourgeoise des Professionnels du Patrimoine (ALPP)
A non-profit organization including over 100 independent companies, established in Luxembourg and abroad, whose interaction with each other covers the entire range of financial and asset-management services for international, private and corporate clients.
Tel : +352 26 26 49 8075
www.alpp.lu

Luxembourg Alternative Administrators Association (L3A) (formerly Luxembourg International Management Services Association (LIMSA)
Created in 2004, the purpose of this association is to promote the Luxembourg trust industry and the representation of the professional interests of its members.

It organizes seminars and other meetings and develops initiatives on a central level, which would be too costly or difficult for individual members. It safeguards the promotion of the commercial interests of trust companies and defend their interests with the authorities, in particular by participating in commissions and working groups.

It has contacts with authorities, other professional organizations, professional chambers and other corporate institutions.
Tel : +352 466 111-2749
www.limsa.lu

Numerous other organizations pertain to PSF, including the following:

The International Facility Management Association (IFMA)
Founded in 1980, IFMA is the largest international association for facility management professionals. With over 24,000 members in more than 100 countries, it is open to facility managers to give them the skills necessary for their business.
www.ifma.org

Fédération de l'IML - Information Lifecycle Management, du Stockage et de l'Archivage (FedISA)
Established on 26 November 2009, FedISA Luxembourg is a not-for-profit association serving innovation in matters of dematerialization and electronic archiving. Its aim is to bring together the players in the Luxembourg market experts, users and suppliers of information lifecycle management, dematerialization, electronic archiving and storage products and services, such as OSIPs and OSISs (support PSF). www.fedisa.lu

ISACA
With more than 140,000 members in over 187 countries, ISACA is a major global provider of knowledge, certifications, exchange, sponsorship and training in terms of security and assurance of information systems, corporate governance concerning information technologies, IT risk control and conformity. Founded in 1967, ISACA sponsors international conferences, publishes a review, and develops international auditing and control standards for IT systems. The institution is open to IT auditors likely to be involved with PSF.
www.isaca.org

Foundation LHoFT (Luxembourg House of Financial Technology)
The foundation LHoFT is an initiative by the public and private sectors to stimulate technological innovation for the financial services sector in Luxembourg, connecting up the national and international Financial Technology community to develop the solutions that will shape tomorrow's world.
Tel.: +352 28 81 02 01
www.lhoft.com

Other useful addresses

Administration des contributions directes
Tel.: +352 40 800-1
www.impotsdirects.public.lu

Administration de l'enregistrement et des domaines
Tel.: +352 44 905-1
www.aed.public.lu

Association des Banques et Banquiers, Luxembourg (ABBL)
Tel.: +352 46 36 60-1
www.abbl.lu

Association Luxembourgeoise des Compliance Officers (ALCO)
Tel.: +352 28 99 25 00
www.alco.lu

Association Luxembourgeoise des Fonds d'Investissement (ALFI)
Tel.: +352 22 30 26-1
www.alfi.lu

Association Luxembourgeoise de Risk Management (ALRIM)
Tel.: +352 26 94 59 97
www.alrim.lu

Cellule de Renseignement Financier (CRF)
Tel.: +352 47 59 81-447

Chambre de Commerce du Grand-Duché de Luxembourg
Tel.: +352 42 39 39-1
www.cc.lu

Commission de Surveillance du Secteur Financier (CSSF)
Tel : +352 26 251-1
www.cssf.lu

Fédération des professionnels du secteur financier Luxembourg (PROFIL)
Tel.: +352 27 20 37-1
www.profil-luxembourg.lu

Fedil
Tel.: +352 43 53 66-1
www.fedil.lu

Système d'indemnisation des investisseurs Luxembourg (SIIL)

House of Training
Tel.: +352 46 50 16-1
www.houseoftraining.lu

Institut des Auditeurs Internes Luxembourg
(IIA Luxembourg)
Tel.: +352 26 27 09 04
www.theiia.org/sites/luxembourg

Institut des Réviseurs d'Entreprises (IRE)
Tel.: +352 29 11 39-1
www.ire.lu

Institut Luxembourgeois des Administrateurs (ILA)
Tel.: +352 26 00 21 488
www.ila.lu

Luxembourg for Finance (LFF)
Tel.: +352 27 20 21-1
www.luxembourgforfinance.com

Luxembourg Private Equity and Venture Capital Association (LPEA)
Tel.: +352 28 68 19 602
www.lpea.lu

5 Appendices

5.1 PSF in a nutshell

Investment firms

PSF	Article	Minimum capital or capital base EUR	Professional indemnity insurance EUR	Activity covered by the status
Investment advisers	24	50,000	EUR 1,000,000 per claim and an aggregate of EUR 1,500,000 per year	"Investment advisers are professionals whose activity consists in providing personal recommendations to a client, either at the initiative of the investment firm, or upon request of that client, in respect of one or more transactions relating to financial instruments. Investment advisers are not authorized to intervene directly or indirectly in the implementation of the advice provided by them. The mere provision of information is not covered by this law."
Brokers in financial instruments	24-1	50,000	EUR 1,000,000 per claim and an aggregate of EUR 1,500,000 per year	Brokers in financial instruments are professionals whose activity consists in receiving or transmitting orders in relation to one or more financial instruments, without holding funds or financial instruments of the clients. This activity includes bringing two or more parties together with a view to the conclusion of a transaction between the parties.
Commission agents	24-2	125,000		Commission agents are professionals whose activity consists in the execution on behalf of clients of orders in relation to one or more financial instruments. Execution of orders on behalf of clients means acting to conclude agreements to buy or sell one or more financial instruments on behalf of clients.
Private portfolio managers	24-3	125,000		Private portfolio managers are professionals whose activity consists in managing portfolios in accordance with mandates given by clients on a discretionary client-by-client basis where such portfolios include one or more financial instruments.
Professionals acting for their own account	24-4	730,000		Professionals acting for their own account are professionals whose business is in trading against proprietary capital resulting in the conclusion of transactions in one or more financial instruments where they also provide investment services or perform in addition other investment activities or deal on own account outside a regulated market or an MTF on an organized, frequent and systematic basis, by providing a system accessible to third parties in order to engage in dealings with those third parties.
Market makers	24-5	730,000		Market makers are professionals whose business is to hold itself out on the financial markets on a continuous basis as being willing to deal on own account by buying and selling financial instruments against its proprietary capital at prices fixed by it.
Underwriters of financial instruments	24-6	125,000 or 730,000 (if they carry out placements on a firm commitment basis)		Underwriters of financial instruments are professionals whose business is to underwrite financial instruments and/or place financial instruments with or without a firm commitment.

PSF	Article	Minimum capital or capital base EUR	Professional indemnity insurance EUR	Activity covered by the status
Distributors of shares/units in UCIs	24-7	50,000 or 125,000 (if they accept or make payments)		Distributors of shares/units in UCIs are professionals whose business is to distribute units/shares of UCIs admitted to trading in Luxembourg.
Financial intermediation firms	24-8	125,000	EUR 2,000,000 per claim and an aggregate of EUR 3,000,000 per year	Financial intermediation firms are professionals whose business is to: a) provide personal recommendations to a client, either at their own initiative, or upon request of the client, in respect of one or more transactions relating to financial instruments or insurance products, and b) receive and transmit orders relating to one or more financial instruments or insurance products without holding funds or financial products of the clients. This activity includes bringing two or more parties together with a view to the conclusion of a transaction between the parties, and c) perform on behalf of investment advisers and brokers in financial instruments and/or insurance products affiliated to them administrative and client communication services which are inherent to the professional activity of these affiliates, by means of an outsourcing contract.
Investment firms operating an MTF in Luxembourg	24-9	730,000		Investment firms operating an MTF in Luxembourg are those professionals whose business is to operate an MTF in Luxembourg, excluding the professionals that operate markets within the meaning of the law on markets in financial instruments.
Investment firms operating an OTF in Luxembourg	24-10	730,000		Investment firms operating an OTF in Luxembourg are those professionals whose business is to operate an OTF in Luxembourg, excluding the professionals that operate markets within the meaning of the law on markets in financial instruments.

Specialized PSF

PSF	Article	Minimum capital or capital base EUR	Professional indemnity insurance EUR	Activity covered by the status
Registrar agents	25	125,000		Registrar agents are professionals whose business is to maintain the register of one or more financial instruments. The maintaining of the register includes the reception and execution of orders relating to such financial instruments, of which they are the necessary accessory.
Professional depositaries of financial instruments	26	730,000		Professional depositaries of financial instruments are professionals who engage in the receipt into custody of financial instruments exclusively from the professionals of the financial sector, and who are entrusted with the safekeeping and administration thereof, including custodianship and related services, and with the task of facilitating their circulation.
Professional depositaries of assets other than financial instruments	26-1	500,000		"Professional depositaries of assets other than financial instruments are professionals whose activity consists in acting as depositary for: – specialized investment funds within the meaning of the law of 13 February 2007, as amended, – investment companies in risk capital within the meaning of the law of 15 June 2004, as amended, – alternative investment funds within the meaning of Directive 2011/61/EU, which have no redemption rights that can be exercised during five years as from the date of the initial investments and which, pursuant to their main investment policy, generally do not invest in assets which shall be held in custody pursuant to Article 19(8) of the law of 12 July 2013 on alternative investment fund managers or which generally invest in issuers or non-listed companies in order to potentially acquire control thereof in accordance with Article 24 of the law of 12 July 2013 on alternative investment fund managers."
Operators of a regulated market authorised in Luxembourg	27	730,000		Operators of a regulated market in Luxembourg are persons who manage and/or operate the business of a regulated market authorised in Luxembourg, excluding investment firms operating an MTF in Luxembourg.
Currency exchange dealers	28-2	50,000		Currency exchange dealers are professionals who carry out operations involving the purchase or sale of foreign currencies in cash.
Debt recovery	28-3			The recovery of debts owed to third parties, to the extent that it is not reserved by law to certificated bailiffs, shall be authorized only with the assent of the Minister of Justice.
Professionals performing lending operations	28-4	730,000		"Professionals performing lending operations are professionals engaging in the business of granting loans to the public for their own account. The following, in particular, shall be regarded as lending operations for the purposes of this article: (a) financial leasing operations involving the leasing of moveable or immoveable property specifically purchased with a view to such leasing by the professional, who remains the owner thereof, where the contract reserves unto the lessee the right to acquire, either during the course of or at the end of the term of the lease, ownership of all or any part of the property leased in return for payment of a sum specified in the contract;

PSF	Article	Minimum capital or capital base EUR	Professional indemnity insurance EUR	Activity covered by the status
Professionals performing lending operations (continued)	28-4	730,000		(b) factoring operations, either with or without recourse, whereby the professional purchases commercial debts and proceeds to collect them for his own account "when he makes the funds available to the transferor before maturity or before payment of the transferred debts". This article shall not apply to persons engaging in the granting of consumer credit, including financial leasing operations as defined in paragraph (a) above, where that activity is incidental to the pursuit of any activity covered by the law of 28 December 1988 on the right of establishment. This article shall not apply to persons engaging in securitization operations."
Professionals performing securities lending	28-5	730,000		Professionals performing securities lending are professionals engaging in the business of lending or borrowing securities for their own account.
Family Offices	28-6	50,000		Those persons carrying out the activity of Family Office within the meaning of the law of 21 December 2012 relating to the Family Office activity and not registered in one of the other regulated professions listed under Article 2 of the above-mentioned law are Family Offices and regarded as carrying on a business activity in the financial sector.
Mutual savings fund administrators	28-7	125,000		"Mutual savings fund administrators are natural or legal persons engaging in the administration of one or more mutual savings funds. No person other than a mutual savings fund administrator may carry on, even in an incidental capacity, the business of administering mutual savings funds. For the purposes of this article, “mutual savings fund” means any undivided fund of cash deposits administered for the account of joint savers numbering not less than 20 persons with a view to securing more favourable financial terms."
Corporate domiciliation agents	28-9	125,000		Corporate domiciliation agents referred to as other professionals of the financial sector in the list of paragraph 1 of Article 1 of the law of 31 May 1999 governing the domiciliation of companies and referred to in this Article, are natural or legal persons who agree to the establishment at their address by one or more companies of a seat and who provide services of any kind connected with that activity. This Article does not refer to the other persons listed in the above-mentioned list.
Professionals providing company incorporation and management services	28-10	125,000		Professionals providing company incorporation and management services are natural and legal persons engaging in the provision of services relating to the formation or management of one or more companies.
Central account keepers	28-11	-		Central account keepers are persons whose activity is to keep issuing accounts for dematerialized securities.

Support PSF

PSF	Article	Minimum capital or capital base EUR	Professional indemnity insurance EUR	Activity covered by the status
Client communication agents	29-1	50,000		"Client communication agents are professionals engaging in the provision, on behalf of credit institutions, PSF, payment institutions, electronic money institutions, insurance undertakings, reinsurance undertakings, pension funds, UCIs, SIFs, investment companies in risk capital (*sociétés d'investissement en capital à risque*) and authorized securitization undertakings established under Luxembourg law or foreign law, of one or more of the following services: – the production, in tangible form or in the form of electronic data, of confidential documents intended for the personal attention of clients of credit institutions, PSF, payment institutions, electronic money institutions, insurance undertakings, reinsurance undertakings, contributors, members or beneficiaries of pension funds and investors in UCIs, SIFs, investment companies in risk capital and authorized securitization undertakings; – the maintenance or destruction of documents referred to in the previous indent; – the communication to persons referred to in the first indent, of documents or information relating to their assets and to the services offered by the professional in question; – the management of mail giving access to confidential data by persons referred to in the first indent; – the consolidation, pursuant to an express mandate given by the persons referred to in the first indent, of positions which the latter hold with diverse financial professionals."
Administrative agents of the financial sector	29-2	125,000		Administrative agents of the financial sector are professionals who engage in the provision, on behalf of credit institutions, PSF, payment institutions, electronic money institutions, UCIs, pension funds, SIFs, investment companies in risk capital, authorized securitiz ation undertakings, reserved alternative investment funds, insurance undertakings or reinsurance undertakings established under Luxembourg law or foreign law, pursuant to a sub-contract, of administration services forming an integral part of the business activities of the originator.
Primary IT systems operators of the financial sector	29-3	370,000		Primary IT systems operators of the financial sector are those professionals who are responsible for the operation of IT systems allowing to draw up accounts and financial statements that are part of the IT systems belonging to credit institutions, PSF, "payment institutions", electronic money institutions, UCIs, pension funds, insurance undertakings or reinsurance undertakings established under Luxembourg law or foreign law.
Secondary IT systems and communication networks operators of the financial sector	29-4	50,000		Secondary IT systems and communication networks operators of the financial sector are those professionals who are responsible for the operation of IT systems other than those allowing to draw up accounts and financial statements and of communication networks that are part of the IT systems belonging to credit institutions, PSF, "payment institutions", electronic money institutions, UCIs, pension funds, insurance undertakings or reinsurance undertakings established under Luxembourg law or foreign law.

PSF	Article	Minimum capital or capital base EUR	Professional indemnity insurance EUR	Activity covered by the status
Dematerialization service providers of the financial sector	29-5	50,000		Dematerialization service providers of the financial sector are dematerialization or conservation service providers within the meaning of the law of 25 July 2015 on e-archiving in charge of the dematerialization of documents on behalf of credit institutions, PSF, payment institutions, electronic money institutions, UCIs, SIFs, investment companies in risk capital (SICARs), pension funds, authorized securitization undertakings, insurance undertakings or reinsurance undertakings, governed by Luxembourg law or by foreign law.
Conservation service providers of the financial sector	29-6	125,000		Conservation service providers of the financial sector are dematerialization or conservation service providers within the meaning of the law of 25 July 2015 on e-archiving in charge of the conservation of electronic documents on behalf of credit institutions, PSF, payment institutions, electronic money institutions, UCIs, SIFs, investment companies in risk capital (SICARs), pension funds, authorized securitization undertakings, insurance undertakings or reinsurance undertakings, governed by Luxembourg law or by foreign law.

5.2 Summary of main regulations and circulars applicable to PSF

(as at 21 October, 2019)

CIRCULAR/REGULATION	TOPIC			
		Investment firms	Specialized PSF	Support PSF
Organization and internal control				
91/78	Segregation of assets for private portfolio managers	X (1)		
91/80 and 96/124	Staff numbers	X	X	X
93/95 and 11/515	License requirements	X	X	X
93/102	Activities of brokers or commission agents	X (2)		
95/120	Central administration		X	X
96/126	Administrative and accounting organization		X	X
98/143	Internal control		X	X
00/17	Investor compensation schemes	X (3)		
04/146	Protection of undertakings for collective investment and their investors against Late Trading and Market Timing practices	X (3)	X (3)	X (3)
17/651 **17/656 and 06/240 as amended by 17/657**	Credit agreements for consumers relating to residential immovable property Administrative and accounting organization IT outsourcing		X	X

CIRCULAR/REGULATION	TOPIC	Investment firms	Specialized PSF	Support PSF
07/307 as amended by 13/560, 13/568 and 14/585	MiFID: Conduct of business rules in the financial sector	X		
07/325 and 07/326 as amended by 10/442 and 13/568	Branches in Luxembourg or activities exercised in Luxembourg by way of free provision of services; branches in another Member State or activities exercised in another Member State by way of free provision of services	X (3)		
17/669	Prudential assessment of acquisitions and increases in holdings in the financial sector	X	X	X
12/538	Lending in foreign currencies	X	X (4)	
12/552 as amended by 13/563, 14/597 and 16/642, 16/647 and 17/655	Central administration, internal governance and risk management	X	X (5)	
13/554	Evolution of the usage and control of the tools for managing IT resources and the management access to these resources	X	X	X
Reg. 16-07 and 17/671	Out-of-court resolution of complaints	X	X	X
15/611	Managing the risks related to the outsourcing of systems that allow the compilation, distribution and consultation of management board/strategic documents	X	X	X
Regs G-D of 25 July 2015	Dematerialization and conservation of documents / Electronic archiving			X (3)
15/631	Dormant or inactive accounts	X	X	X
18/697	Organizational arrangements applicable to fund depositaries which are not subject to Part I of the Law of 17 December 2010 relating to undertakings for collective investment, and, where appropriate, to their branches	X	X(3)	
Remuneration				
10/437	Remuneration policies in the financial sector	X	X	X
11/505	Proportionality principle when establishing and applying remuneration policies	X		
17/658	Adoption of the European Banking Authority's guidelines on sound remuneration policies	CRR only		
Fight against money laundering and terrorist financing				
Reg. 12-02 10/495, 15/609, 18/701	Fight against money laundering and terrorist financing	X	X	X

CIRCULAR/REGULATION	TOPIC			
		Investment firms	Specialized PSF	Support PSF
11/528	Abolition of the transmission to the CSSF of suspicious transaction reports	X	X	X
11/529	Risk analysis regarding the fight against money laundering and terrorist financing	X	X	X
17/650	Application extended to primary tax offences	X	X	X
Prudential ratios				
06/260 **07/290 as amended by 10/451, 10/483, 10/497 and 13/568** **07/301 as amended by 08/338, 09/403, 11/506 and 13/568** **10/494** **11/501** **11/505** **12/535** **13/572**	Capital adequacy ratios / large exposures; assessment process	X		
Reg. 14-01, 15-01 and 15-02 and 13/575, 14/582, 14/583, 15/606, 15/618, 15/620 and 15/622 as well as Regulation (EU) No 575/2013, ad hoc Commission Delegated Regulations (EU) and ad hoc Commission Implementing Regulations (EU)	Supervisory reporting requirements (CRR/CRD IV / FINREP)	X (3)		
09/403	Sound liquidity risk management	X		
11/506	Principles of a sound stress testing programme	X		
16/02	Scope of deposit guarantee and investor compensation	X		
17/03, 17/649	Adoption of the guidelines issued by the European Banking Authority (EBA) on the methods of providing information in summarized or collective form for the purposes of the Banking Recovery and Resolution Directive (BRRD)	X		
Reporting				
05/187 completed by 10/433	Financial information to be submitted to the CSSF on a periodic basis	X	X	X
08/334 and 08/344	Encryption specifications for reporting firms to the CSSF	X	X	X
08/364	Financial information to be submitted to the CSSF on a quarterly basis by the support PSF			X

CIRCULAR/REGULATION	TOPIC			
		Investment firms	Specialized PSF	Support PSF
08/369	Prudential reporting	X	X	X
10/457	Electronic transmission to the CSSF of the long-form report and of the management letter	X		
11/503	Transmission and publication of financial information and relating deadlines	X	X	X
11/504	Frauds and incidents due to external computer attacks	X	X	X
13/577	Table "Responsible persons for certain functions and activities"	X		
Domiciliation				
01/28, 01/29, 01/47 and 02/65	Domiciliation		X (6)	
Supervision				
00/22	Supervision of investment firms on a consolidated basis	X (3)		
08/350 as amended by 13/568	Prudential supervisory procedures for support PSF			X
12/544	Optimization of the supervision exercised on the support PSF by a risk-based approach			X
15/629 as amended by 16/641	Supplementary supervision to be applied to financial conglomerates and definition of structure coefficients to be observed by the regulated entities belonging to these financial conglomerates	X		
External audit				
03/113 and 13/571	Practical rules concerning the mission of external auditors of investment firms	X		

(1) applicable only to private portfolio managers (art. 24-3)

(2) applicable only to brokers in financial instruments (art. 24-1) and commission agents (art. 24-2)

(3) depending on the activity of the PSF

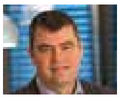
(4) applicable only to professionals performing lending operations (art. 28-4)

(5) applicable only to professionals performing lending operations (art. 28-4) and only chapter 3 of part III of the circular is applicable

(6) applicable only to PSF providing domiciliation activities

Contacts

PSF



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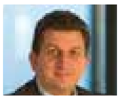

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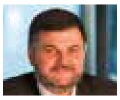

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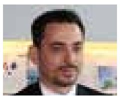

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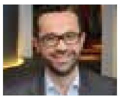

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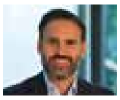

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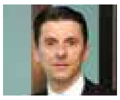

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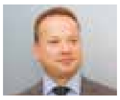

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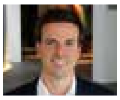

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