APRIL 2020

SUMMARY OF SPOT INSPECTIONS

AIFM REPORTING BY ASSET MANAGEMENT COMPANIES

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INTRODUCTION

This series of SPOT inspections for 2019 targeting "AIFM" asset management companies (AMCs) consisted of a review of the AIFM reporting system of five market participants. As announced in the AMF's supervision priorities for 2019: *"One of the primary objectives of the AIFM Directive was to introduce reporting requirements for AMCs and alternative investment funds (AIFs) for supervisory and financial stability purposes. The Directive requires management companies to produce a risk report, providing information on the management company and the funds it manages, relating to both the composition of assets and the level of risk of each fund (liquidity, leverage, etc.). It must also include descriptive data on the strategy and exposures of each AIF. The quality of the data received remains a crucial issue. [...] Work is also being carried out at the European level within the European Securities and Markets Authority (ESMA)."* This supervisory action is a continuation of the study by C. Le Moign and K. Siempis published in January 2019 entitled *Initial Lessons Learned from AIFM Reporting*.

The main purpose of these targeted inspections was to verify (i) the quality of the data submitted to the AMF in the reports and (ii) the procedures and controls implemented by the AMCs.
These inspections on AIFM reporting conducted in 2019 were carried out simultaneously in five AMCs. The verifications covered the period 2017-2018 and made it possible to examine:

- the organisation and procedures relating to AIFM reporting;
- the quality and completeness of the data submitted to the AMF;
- the methodologies used to calculate leverage, manage liquidity and conduct stress tests;
- the control systems for AIFM reporting used by the AMCs;
- the information provided to investors on leverage and liquidity.

In 2019, three standard inspections were also carried out on this subject. This review is also based on the analysis of data collected by the AMF and on monitoring activities.

This review aims to provide a clarification of the practices of the AMCs under review with regard to their AIFM reporting systems.

Based on the findings of this series of SPOT inspections, the AMF notes that improvements need to be made to the systems in place in the AMCs inspected.

This document is neither a position nor a recommendation. The practices identified as either "good" or "poor" highlight approaches identified during the inspections that may facilitate, or complicate, compliance with regulations on the creation, provision, control and dissemination of information in AIFM reporting.

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1 SUMMARY OF THE MAIN FINDINGS OF THE INSPECTIONS

➢ ***Scope of Reporting***

"AIFM" AMCs may be partially or entirely subject to the AIFM Directive, either because of thresholds for AIF assets under management or because of their decision to be fully subject to the scheme ("opt-in"). The reporting may be sent to the AMF on an annual, half-yearly or quarterly basis, depending on the value of AIF assets under management.

Table 1: Reporting Frequency[1]

Type of Reporting	AMC's assets <= thresholds (€100m and €500m)	AMC's assets > thresholds but <= €1bn	AMC's assets > €1bn
Basic AIFM Reporting *(Articles 3(3)(d) and 24(1) of the Directive 2011/61/EU, Article 110 (1 and 3) of Delegated Regulation No. 231/2013)*	Annually	Half-yearly	Quarterly
"Lighter" AIF Reporting *(Articles 3(3)(d) and 24(1) of the Directive 2011/61/EU, Article 110 (1 and 3) of Delegated Regulation No. 231/2013)*	Annually (for each AIF managed)	Half-yearly (for each AIF managed)	Quarterly (for each AIF managed)
"Full" AIF Reporting *(Article 24(2) of the Directive 2011/61/EU, Article 110 (2 and 3) of Delegated Regulation No. 231/2013)*	Annually only if opted in	Half-yearly (for each AIF managed)	Quarterly (for each AIF managed)
Leverage *(Article 24(4) of the Directive 2011/61/EU, Articles 110 (3 and 5) and 111 of Delegated Regulation No. 231/2013)*	Annually only if opted in and leverage >3	Half-yearly if leverage >3	Quarterly if leverage >3
Number of French AMCs reporting at least once by the end of 2018	298	73	104

AIFM reporting enables the AMF to collect information on the:

- AIFM AMCs:
  - ✓ identification of the asset manager and the type of reporting;
  - ✓ the 5 main markets/trading venues on which it operates, with the aggregate value of the assets traded;
  - ✓ the 5 main instruments traded;
  - ✓ amount of assets under management.
- AIFs:
  - ✓ the characteristics of the fund, its identifiers (LEI, ISIN, CUSIP,[2] SEDOL,[3] Bloomberg, Reuters and other codes);
  - ✓ the 5 main instruments traded by the AIF, including the instrument code, its name, the market on which it is traded if applicable, its code, the direction (buy/sell), the amount traded, etc.;
  - ✓ the distribution of the portfolio by geographical area;

[1] Source: *Initial Lessons Learned from AIFM Reporting*, published by the AMF on 23 January 2019.
[2] Committee on Uniform Security Identification Procedures, instrument code mainly used for securities in the United States and Canada.
[3] Stock Exchange Daily Official List, instrument code used for securities in Great Britain and Ireland.

- ✓ data on trades;
- ✓ concentration of investors if known;
- ✓ type of investors (households, banks, governments/public entities, etc.);
- ✓ the 5 main counterparties;
- ✓ literary presentation of management strategies;
- ✓ data relating to the liquidity of the fund's assets and liabilities;
- ✓ stress test results.

➢ ***Glossary***

Term	Definition
AIF	Alternative Investment Funds under the AIFM Directive (No. 2011/61/EU)
AIFM	AIF Manager or the AIF itself if it is self-managed
AIFM Directive	AIFM Directive No. 2011/61/EU
AIFM DR	Commission Delegated Regulation (EU) No. 231/2013 of 19 December 2012
Scope **(Article 24 of the AIFM Directive)**	AIFM reporting covers the AIFM and the *"EU AIFs it manages and [...] the AIFs it markets in the Union [...]"*
Reporting frequency	See Table 1 above on reporting frequency
Basic reporting on asset managers (Article 24(1) of the AIFM Directive) ESMA guidelines,[4] Annex II-XI	This reporting includes in particular: - identification details of the fund manager: name, national identification code, LEI, jurisdiction; - 5 main markets of which it is a member or where it actively trades (indicating the MIC codes); - 5 main instruments it trades, their breakdown into financial instruments and other assets, the investment strategies of the AIFs and their main investment sectors and geographical areas; - the diversification/concentration of the AIF's portfolio, including its main exposures and most important concentrations.
"Light" reporting on AIFs (Article 24(1) of the AIFM Directive)	This reporting covers each AIF and must indicate the main exposures and concentrations of each of the AIFs managed.
"Full" reporting on AIFs (Article 24(2) of the AIFM Directive)	This reporting covers each AIF and includes, in addition to the basic reporting, (i) the percentage of AIF assets that are subject to special treatment arising from their illiquid nature, (ii) any new arrangements for managing the liquidity of the AIF, and (iii) the current risk profile of the AIF and the risk management systems employed by the AIFM to manage the market risk, liquidity risk, counterparty risk and other risks including operational risk.
Special reporting on AIFs (Article 24(4) of the AIFM Directive)	Special reporting is required if the AIFM manages AIFs employing leverage on a substantial basis, i.e. exceeding three times the net asset value of the fund. It includes providing: - the overall level of leverage employed by each AIF it manages, its origin (borrowing of cash and/or securities, use of financial derivatives); - five largest sources of borrowed cash or securities; - the amounts of leverage received from each of those sources.
Gross method for calculating leverage (Article 7 of the AIFM DR)	The gross exposure of the AIF (the sum of the absolute values of all positions – excluding cash or cash equivalent positions in the fund's base currency and excluding borrowed cash – with derivatives represented by their underlying equivalents and borrowing, if reinvested), in relation to the inventory value.
Commitment method for calculating leverage (Article 8 of the AIFM DR)	The sum of the absolute values of all positions after taking **hedging and netting rules** into account.

The five AMCs inspected are all entirely subject to the AIFM Directive. Three are subject to quarterly reporting and two to half-yearly reporting because of the amount of assets under management. Only one AMC uses an external service provider, to which it outsources aggregating the data from its AIFs, checking that data and submitting it to the AMF. The other four manage these operations in-house using their own IT tools.

4 ESMA/2013/600 of 24 May 2013.

The work revealed that for the financial years 2017 and 2018, the number of reports submitted to the AMF was in line with the number of reports expected, except for the reporting of one non-European fund marketed in the European Union (the AMC remedied this anomaly during the inspection). However, some data was missing from the reports submitted by the five asset management companies. This missing data related to ISIN and/or LEI codes (3/5 AMCs), management strategy (2/5), investor concentration (1/5), trading and netting mechanisms for counterparty risk (2/5), and the existence of special regimes (5/5). Furthermore, three AMCs did not submit any special reports to the AMF, even though the leverage of several of their funds required it as it exceeded their net assets by at least three times. Finally, one AMC reported negative leverage for its funds to the AMF, which is impossible by design, since the positions are calculated in absolute terms.

The inspections found that the five AMCs inspected all had specific AIFM reporting procedures or detailed procedures for calculating leverage, managing liquidity, reporting requirements and carrying out stress tests. However, these procedures are not sufficiently operational because they do not provide a framework for the traceability of the data used (2/5), the methods used to calculate leverage (2/5) and the scope of reporting (2/5), they fail to define the assumptions used for liquidity management under normal market conditions and in times of stress (3/5), they do not take into account the time required for settlement of the funds' assets when establishing their liquidity profile on the liabilities side (5/5), and finally they fail to document the results obtained during stress tests (1/5).

The inspection task force's analysis of the calculation files used by the five AMCs to prepare their AIFM reports revealed some discrepancies, for four of the AMCs, between the results and the data in the reports submitted to the AMF. The AMCs explain these relatively small discrepancies by variations in exchange rates or by using different dates for the data or a few negative values for the NAV of the funds (2/5), by incorrect treatment of foreign exchange futures, i.e. using the value of the contract and not its notional value in relation to leverage (1/5), and by differences in the bucket[5] between internal reporting and AIFM reporting (1/5).

In addition to this sample of five companies, the findings of "standard" inspections at three AMCs were included in the analysis relating to liquidity management.
The results from this analysis show that the liquidity risk management system is complete and operational in seven out of the eight AMCs (7/8). However, some asset liquidity criteria are only justified by expert opinion (8/8), the portfolio distortion caused by liquidating assets is not taken into account (7/8), and the time required for securities settlement is not taken into account when estimating the liquidity of the funds (7/8). Only two AMCs have established a liability management approach, one by allocating all liabilities over a single time frame and the other by ensuring diversification. The stress tests carried out by the AMCs, designed to simulate a crisis situation, were not sufficiently operational (6/8) because the assumptions used were not adequately explained and documented (4/8) and because the distinction between liquidity management under normal market conditions and that under stressed market conditions was not explained (2/8). Furthermore, the existence and results of these stress tests could not be confirmed and substantiated (4/8).

In addition, only three of the five (3/5) AMCs in this SPOT inspection campaign carried out permanent and periodic checks on AIFM reporting, although the lack of traceability for some calculations and source data did not allow the inspection task force to corroborate their conclusions on reporting compliance and adequate risk management.

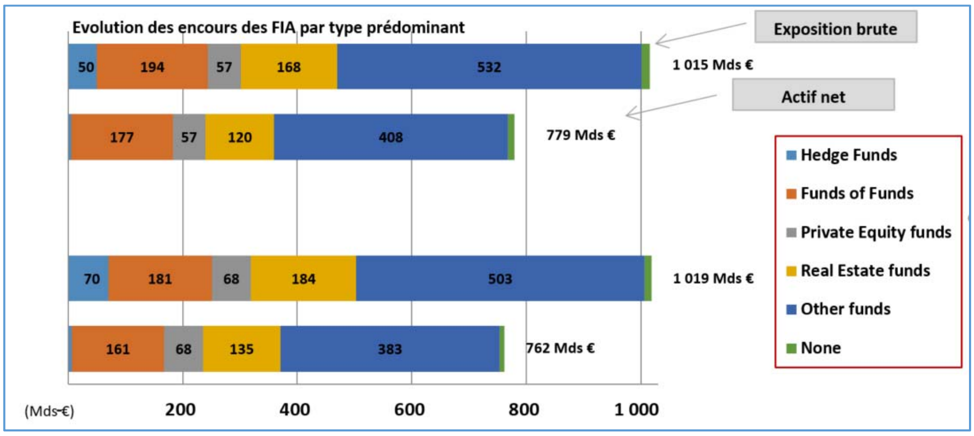
[5] Classification by liquidity category.

Finally, although asset managers are required to disclose to investors the risks and leverage levels associated with the AIFs they manage, two out of five (2/5) AMCs did not provide clear and accurate information on this in the funds' prospectuses and annual reports.

2 CONTEXT AND SCOPE

2.1 OVERALL DATA AND PRESENTATION OF THE SAMPLE OF AMCs INSPECTED

At the end of 2018, 7,593 funds were subject to AIFM reporting to the AMF, representing €762 billion in net assets and €1,019 billion in exposure (compared with 7,461 funds, representing €779 billion in net assets and €1,015 billion in exposure in 2017).



The five AMCs selected for this thematic inspection were chosen for the diversity of the management strategies implemented, making it possible to observe the way in which these AMCs establish leverage and liquidity measures. AMCs that manage private equity or real estate funds were not selected. They are all entirely subject to the AIFM Directive (three are subject to quarterly reporting and two to half-yearly reporting):

- AMC 1 is independent and specialises in selecting credit instruments for clients who are exclusively professional (mainly institutional investors);
- AMC 2 is majority owned by an institutional investor (an insurance group). Its services are provided exclusively to professional clients;
- AMC 3 is independent and specialises in systematic investment. Its clients are individuals and professionals, but the AIFs it manages are intended solely for professional clients;
- AMC 4 is independent and specialises in systematic investment. The AIFs it manages are intended solely for professional clients, mainly domiciled outside France;
- AMC 5 is part of a banking group. Almost all of its clients (97%) are institutional clients.

The findings relating to the calculation of leverage and liquidity management carried out as part of the standard inspections of three AMCs have been included in this review. These three AMCs, which are entirely subject to the AIFM Directive (two of which are subject to quarterly reporting and one to annual reporting), are majority owned by a bank with clients that are exclusively professional (AMC 6), independent with mainly retail clients (AMC 7), and owned by a credit institution and managing AIFs intended solely for retail clients (AMC 8).

2.2 APPLICABLE REGULATIONS

The work of the inspection task force was based primarily on the following main sources of legislation:

- Directive 2011/61/EU of the European Parliament and of the Council of 8 June 2011 ("**AIFM Directive**"), and in particular its Articles 23, 24 and 25, on information to be disclosed to investors (including on liquidity and leverage), reporting obligations to competent authorities and the use of information by competent authorities, supervisory cooperation and leverage limits;
- the Monetary and Financial Code, Articles L. 214-24-20 and L. 533-22-2-1;
- Commission Delegated Regulation (EU) No. 231/2013 of 19 December 2012 ("**AIFM DR**") and its Articles 2, 6 to 11, 38 to 40, 42 to 49, 57, 61, 62, 75 to 81, 103 to 112 and its annexes;
- AMF General Regulation ("AMF GR") and its Articles 321-23, 321-30, 321-31, 321-36, 321-77, 321-78, 321-79, 321-83 and 421-34 to 421-37;
- the ESMA Q&A on the AIFM Directive (ESMA34-32-352);
- AMF Instructions 2011-20 and 2012-06 and AMF Position 2014-09, which transposes the ESMA Guidelines (ESMA/2014/869EN).

3 OBSERVATIONS AND ANALYSES

As in introduction, it is important to note that the information that AMCs need to collect and calculate for their AIFM reporting is in the main directly related to their day-to-day activities. AIFM reporting should therefore be integrated, as far as possible, into the management processes and internal management tools of AMCs, in particular with regard to risk management. AMCs should not view AIFM reporting as an administrative exercise to be carried out independently and with a different level of requirements from their day-to-day management activities. It is important to remember that the reliability of data is a significant challenge in terms of its use at both national and European levels and by ESMA as part of an overall risk analysis.

3.1 ORGANISATION WITHIN AMCs AND THE EXISTENCE OF PROCEDURES

AIFM reporting combines data and information that varies considerably[6] in terms of both its nature and the expected responses, alternating between figures and explanations in text form (see below).
As such, preparing the reports requires support from various departments and/or experts as well as data aggregation. Calculations are not always automated by the AMCs and depend in particular on management strategies (see the concepts of netting or hedging below) and the sometimes qualitative answers to be given (special regimes, for example). In this context, coordinating all the work/data delivery and defining the first-level controls and distribution of tasks, up to validating and sending the data, are essential.

The AMF examined the procedures in place for organising reporting and data production to check whether the AMCs inspected had implemented and maintained operational procedures to prevent any risk of non-compliance. To this end, the inspection task force analysed the procedures from different angles: their existence, their level of detail, the nature of the provisions they contain and their application.
The five companies inspected all had specific AIFM reporting procedures or detailed procedures for calculating leverage, managing liquidity, reporting requirements and carrying out stress tests. However, none of them detailed how AIFM reporting is organised nor covered all the specific points of this reporting (methodologies used, leverage calculations, liquidity management, reporting obligations or conducting stress tests, etc.).

➢ Procedure organising how the reporting is produced

Of the five AMCs inspected, only one (AMC 1) uses an external service provider, to which it outsources aggregating the data from its AIFs, checking that data and submitting it to the AMF, after validation by the AMC. The other four manage these operations in-house using their own IT tools.

The task force noted that, to varying degrees, **the AMCs' procedures lacked detail** in relation to AIFM reporting, which had an impact on the quality of the reporting to the AMF. For example, the service provider responsible for AIFM reporting (AMC 1) collected data from different sources (depositaries, the risk control team, fund managers), consolidated this data, and then submitted it to the AMC for validation before submitting it to the AMF. However, the inventories of some funds presented positions for a different month from the reporting month (e.g. May position for the report produced at the end of June) because this data was the latest available on the date it was extracted. Since the provider did not have this information, it was unable to include it in its reporting.

➢ Calculation procedures

For AMCs 1 and 2, the procedures for AIFM reporting are not operational ; neither the methods used to calculate leverage nor the scope of reporting are sufficiently detailed. For AMCs 1, 3, 4 and 5, the assumptions used for liquidity management are not explained.
For example:
- AMC 2's procedures do not provide for an audit trail of the calculations used to prepare the reports ;
- AMC 5's procedures are neither sufficiently detailed nor exhaustive with regard to the netting rules applied for calculating leverage;

[6] Management reporting includes 38 variables and AIF reporting 301 variables. 60 variables are mandatory, 126 are optional (i.e. must only be provided if the AMC has the information, see below, such as the existence of an ISIN code) and 116 are conditional on the responses provided (information on AIF shares conditional on the existence of such shares).

- No AMC considered in its procedures the time required for settlement when establishing the liquidity profile of the funds, i.e. the time needed for the fund to liquidate its assets and receive the cash, in order to ensure fair treatment of investors by matching the liquidity profile to the assets and liabilities (i.e. the ability of the fund to reimburse investors within the time frame set out in the prospectus). In general, the AMCs inspected paid insufficient attention to the ESMA Q&A (e.g. question 42 of the Q&A on settlement time) ;
- The procedures of all five AMCs included the carrying out of stress tests on the funds' assets and liabilities. However, the scenarios used were not sufficiently detailed and justified for AMCs 1, 3, 4 and 5 (see below).

↗ **Regulatory reminder:** The AIFM must, taking into account the nature, size and complexity of each AIF it manages, have properly documented and operational procedures for the organisation and submission of AIFM reporting, which specify the methods for calculating exposure (Article 6 of the AIFM DR), the profile and assessment of the level of liquidity of each AIF (Articles 46 and 47 of the AIFM DR), enabling it to detect any non-compliance (Article 321-30 of the AMF General Regulation for AMCs that are partially subject to the AIFM Directive and Article 61 of the AIFM DR for AMCs that are entirely subject to the AIFM Directive). These procedures must establish, define and oversee the carrying out of ex post tests to measure the risks to which the funds are exposed, using models based on estimates and forecasts, and define stress tests under normal and exceptional liquidity conditions (Articles 45 and 48(2) of the AIFM DR).

↗ The AMF notes the **good practices** of (1) performing consistency checks before reports are sent by a person other than the person responsible for producing them (in addition to the first-level control) and (2) clarifying the role of the parties involved, the information to be submitted and the checks on that information.

↗ The AMF also notes the **poor practice** of not providing sufficient detail in the procedures about the market assumptions used for stress tests.

3.2 SCOPE AND COMPLETENESS OF REPORTING SUBMITTED TO THE AMF

➢ Scope

For financial years 2017 and 2018, the number of basic AIFM reports submitted to the AMF was in line with the number of reports expected, with the exception of one report concerning a non-European AIF managed by AMC 5.

AMCs 2, 3 and 4, which were affected by the introduction of special reporting, did not submit it, even though the level of leverage of their funds (more than three times their net asset value) meant that a special report was due (see box below).

Focus on Special Reporting

The AIFM Directive (Article 24(4)) states that an AIFM employing leverage on a substantial basis (i.e. where the AIF's exposure, calculated according to the commitment method, exceeds three times the fund's net asset value, in accordance with Article 111 of the AIFM DR) must make *"available information about the overall level of leverage employed [...] to the competent authorities of its home Member State"*. The special reporting must:

- provide a breakdown between leverage arising from borrowing of cash or securities and leverage embedded in financial derivatives;
- specify the extent to which the AIF's assets have been reused under leveraging arrangements;
- include the identity of the five largest sources of borrowed cash or securities for each of the AIFs and the amounts of leverage received from each of those sources for each of those AIFs.

In general, the AMCs were not fully aware of the scope of AIFM reporting.

➢ Completeness of data submitted to the AMF

The regulatory deadline for submitting AIFM reporting to the AMF is 30 days.[7] Only AMCs 1, 2 and 4 did not meet this deadline. This deadline was significantly exceeded by AMC 4 (by 21 days on average), due to the very late submission of one reporting (several months). AMCs 1 and 2 exceeded the deadline by 5 and 12 days respectively. Moreover, while the main figures were presented in the five AMCs' AIFM reporting, much of the data essential for the reporting to be useful was missing. Accordingly, the task force noted:

- ✓ the omission of the ISIN code and/or LEI code (and other codes requested if they exist, see box below) in the reporting from AMCs 1, 4 and 5;
- ✓ that AMCs 1 and 2 did not report the strategy of their funds ("none" category);
- ✓ that AMC 3 did not report investor concentration despite knowing it;
- ✓ that information on trading and netting mechanisms for counterparty risk was incomplete for AMCs 1 and 5;
- ✓ under the heading of special regimes,[8] AMCs 1, 3 and 4 did not provide information on their existence, and AMCs 2 and 5 reported "0" (i.e. the absence of such regimes).

After analysis, it appears that this information was available and, therefore, should have been provided by the AMCs. The AMCs indicated that the absence of this information was due to the fact that they considered this information to be "optional", and including it in their reports was at their discretion.

[7] AIMF DR, Article 110(1), except where the AIF is a fund of funds.

[8] Setting up gates, side pockets, dealing suspension etc.

Focus on Identification Data

The optional identification data for shares and share classes is essential for the reporting to be useful. They must be provided for the fund and all its share classes, where applicable. This information is set out in ESMA Implementing Technical Standards (ITS) 2013/1358 and is as follows:

Fund level information

Question	Type of Information
24	AIF LEI code
25	AIF ISIN code
26	AIF CUSIP code
27	AIF SEDOL code
28	AIF Bloomberg Code
29	AIF Reuters code
30	AIF ECB code
31	Old AIF national identifier – Reporting Member State
32	Old AIF national identifier – National code

Share class level information

Question	Type of Information
34	Share class national code
35	Share class ISIN code
36	Share class SEDOL code
37	Share class CUSIP code
38	Share class Bloomberg code
39	Share class Reuters code
40	Share class name

Regulatory reminders:

- AIFM reporting provides for three types of fields, mandatory, optional and conditional, all of which must be filled in;[9]
- For funds using leverage on a substantial basis, i.e. exceeding three times the net asset value, the AIFM must submit a special report to the AMF informing it of the level of leverage used (Article 24(4) of the AIFM Directive; Article 111 of the AIFM DR);
- Funds governed by non-European law but marketed in the Union are subject to reporting (Article 110(2)of the AIFM DR).

3.3 ESTIMATING THE LIQUIDITY PROFILE

According to Recital 64 of the AIFM DR, *“Directive 2011/61/EU requires the Commission to specify how the investment strategy, liquidity profile and redemption policy are to be aligned. The consistency between those three elements is ensured if investors are able to redeem their investments in accordance with the AIF redemption policy, which should cover conditions for redemption in both normal and exceptional circumstances, and in a manner consistent with the fair treatment of investors”.*

In accordance with Article 46 of the AIFM DR, *“AIFMs shall be able to demonstrate to the competent authorities of their home Member State that an appropriate liquidity management system and effective procedures […] are in place taking into account the investment strategy, the liquidity profile and the redemption policy of each AIF”.*
In accordance with Article 47 of the AIFM DR, *“the AIFM maintains a level of liquidity in the AIF appropriate to its underlying obligations, based on an assessment of the relative liquidity of the AIF’s assets in the market, taking account of the time required for liquidation and the price or value at which those assets can be liquidated, and their*

[9] The ESMA Q&A clarifies in question 21 that optional information should be provided in AIFM reports if available to asset managers.

sensitivity to other market risks or factors".[10] Accordingly, the AIFM must implement and maintain adequate limits for the liquidity or illiquidity of the AIF consistent with its underlying obligations to investors and its associated redemption policy.

In order to understand the fund's liquidity risk, and in accordance with Article 110(2)(c), (d) and (f) and Annex III of the AIFM DR, the reporting must include various pieces of information relating to the fund's assets but also to its liabilities: redemption frequency, the existence of mechanisms to manage liquidity (notice periods, gates, etc.), characteristics of the liabilities (type of investors, concentration on the main investors).[11]

Only AMC 3 does not have an appropriate liquidity management system or effective procedures.

Description of the reporting fields relating to liquidity

Information on Assets	Information on Liabilities
Liquidity Scale The AMC shall indicate the proportions of the portfolio that it may liquidate over several time frames.	**Redemption Policy** The AMC shall indicate the proportions of redemptions that it may honour within the same time frames. It shall include quantitative data in its forecasts: - redemption frequencies; - notice periods; - liability diversification; - nature of the liabilities.

➢ Information on assets and their level of liquidity

Various methods have been identified for estimating the liquidity of assets. The asset liquidation period depends on the nature of the assets and varies according to the AMC concerned. It was therefore noted that there are various possible liquidation time frames for each of the following assets:

- For Equities
    - AMC 1 estimates the liquidity of equities based on the volumes traded on the markets, without providing any further details;
    - AMCs 2, 7 and 8 consider that equities can be liquidated, based on expert opinion, up to 20% or 30% of the volumes traded on the markets over the previous three months;
    - AMC 5 considers that equities can be liquidated in one to two days (execution date) at a level close to their book value (valuation of mid-market positions) under normal market conditions;
    - AMC 6 considers that equities can be sold for 20% of the average volume calculated over the previous 10 days, with no significant price impact;
    - AMCs 3 and 4 do not specify their approach.

- For Futures Contracts

  Seven of the eight (7/8) AMCs use futures:
    - AMCs 4 and 8 consider, based on expert opinion, that futures can be liquidated in a proportion equal to 10% of the daily volume traded on the futures market;

[10] Article 47(1) of the AIFM DR (clarified by question 42 of the ESMA Q&A).
[11] ESMA, AIFMD reporting IT technical guidance, 2013/1358.

- AMC 5 considers that futures can be liquidated in 1 to 2 days (execution date) at a level close to their book value under normal market conditions;
- AMCs 1, 2, 3 and 6 use these highly liquid instruments without further detailing their approach.

- <u>For Bonds</u>

  Four of the eight (4/8) AMCs use bonds:
  - AMCs 1 and 6 consider that bonds can be liquidated in proportions fixed by a liquidity grid. The grid assigns bonds a liquidity score to which is associated an amount that can be liquidated on a daily basis:
    - ✓ For AMC 1, the liquidity scores range from 1 to 5 (from the most liquid to the least liquid) and are based on 6 criteria: objective criteria (type and size of the instrument, type of issuer, and size of the issuer's capital structure) and empirical criteria (number of daily contributions sent by counterparties, and execution size, type and average amount when buying and selling);
    - ✓ For AMC 6, a liquidity rating is assigned to each bond according to six criteria (maturity, rating, issue size, membership of the main indices, bid-ask spread, number of contributors). The final liquidity score (weighted average of the ratings for each of the six criteria) varies from 1 (more liquid) to 5 (less liquid). AMC 2 assigns a bid-ask spread to each type of bond. Bonds that meet these conditions are considered liquid and transferable overnight, regardless of the size of the position held by the funds, their holding ratio and the volume of trading.
  - AMC 8 uses different bond-related criteria:
    - ✓ If the price is below 80%, the transferable amount used is halved;
    - ✓ If the residual maturity is more than 10 years, the transferable amount used is halved;
    - ✓ If the securities have a maturity of less than one year, the liquidation period used will be one day.

- <u>For Convertible Bonds</u>

  Two of the eight (2/8) AMCs use convertible bonds:
  - AMC 2 applies the same approach as for non-convertible bonds (see above);
  - AMC 8 considers that convertible bonds can be liquidated based on the sensitivity of these securities' underlying equity and on criteria related to the geographical area, size of the issue and rating:
    - ✓ If the delta[12] is close to zero (<0.3 for bonds in the European region or <0.5 in other regions), the convertible bond is assumed to behave like a debt security and the daily transferable amount will depend on the geographical area, the rating (High Yield and/or Investment Grade) and the amount of the issue;
    - ✓ If the delta is greater than 0.8, the convertible bond is assumed to behave like an equity and the liquidity used will vary depending on the liquidity of the underlying security, the delta, the price of the underlying equity and a coefficient equal to 20% for bonds in the US region and 30% elsewhere;
    - ✓ If the delta is between 0.3 and 0.8, the method used is the linear method derived from the previous two methods.

Only AMC 5 uses CDOs that it considers can be liquidated in 14 days, based on expert opinion.

- <u>For Options</u>

  Two of the eight (2/8) AMCs use options:

[12] The delta of a convertible issue measures the sensitivity of the price of the convertible bond to changes in the value of the underlying equity. Its value is between 0 and 1.

- AMC 5 considers that, based on expert opinion, options can be liquidated in one to two days (execution date) at a level close to their book value (valuation of mid-market positions) under normal market conditions;
- AMC 8 considers, based on expert opinion, that:
  - ✓ For equity options, the liquidation period for the position is two days;
  - ✓ For other options, the daily transferable volume is 20% of the average daily volume over the previous month.

- For OTC Derivatives other than options (swaps, CDSs, forwards)
  Only AMC 8 uses other OTC derivatives and considers that it takes one day to liquidate these instruments (to terminate or assign positions).

Furthermore, only AMC 8 takes into account the time required for securities settlement when estimating the liquidity of its funds.

With the exception of AMC 2, no AMC takes into account the portfolio distortion caused by liquidating assets.

AMC 2 performs back-testing of liquidity management assumptions.

For AMC 6, the assumptions used to calculate the liquidity profile are based on stress tests. There is therefore no distinction between liquidity management under normal market conditions and liquidity management under stressed market conditions.

AMC 1 assesses liquidity at the end of a process that involves various teams. The principles of this process are as follows:

- An estimate of a liquidity score associated with a typical amount that can be liquidated daily ("value to trade") without pressure on the market price. This liquidity score is estimated at acquisition time and submitted to the fund managers for their opinion. They may propose a modification to take into account factors such as the usual size of the lines traded or proposed by the broker and market conditions. The process is documented by sending an email to the risk controller. The risk controller's response is also documented by email;
- The liquidity score of each instrument and the associated volume is recorded daily in a database;
- The liquidity score of each instrument is reviewed at the monthly meeting of the risk management and control teams. This meeting also reviews the value to trade associated with these liquidity scores;
- The number of days required to liquidate a position is estimated by considering the size of the position in relation to its value to trade. For example, if the AMC has a €10 million bond line with a daily value to trade of €4 million, the position will be considered liquid after three days and fully recorded on the corresponding bucket.

Back-tests are carried out to validate the associated values to trade (but are not formalised).

The eight AMCs use a wide variety of liquidity measures for different asset types. This shows that methods for assessing liquidity can vary greatly from one AMC to another. It is therefore all the more important to document the assumptions used to estimate liquidity in order to ensure that the methodology used is robust.

- **Regulatory reminder:** The AIFM must take into account the time required for securities settlement when estimating the liquidity of its funds if this time has a non-negligible impact on the liquidity profile of those funds (question 42 of the ESMA Q&A).

- The AMF notes the **good practice** of accurately documenting the assumptions used to calculate the liquidity profile.
- The AMF notes the **good practice** of back-testing liquidity management assumptions.
- The AMF notes the **good practice** of estimating a liquidity score for assets and mapping out the operational process.

- The AMF notes the **poor practice** of not taking into account the settlement time in liquidity management.
- The AMF notes the **poor practice** of not taking into account portfolio distortion linked to asset liquidation.
- The AMF notes the **poor practice** of determining the liquidity of certain assets "based on expert opinion" without auditing the approach.

Information on liabilities

AMCs 5 and 6 have established a liability management approach. While the other six AMCs monitor liabilities, this monitoring is not documented as a first step.

To establish the liquidity profile of the liabilities, AMC 6, which manages AIFs that are either dedicated to one investor or held by a single holder, has chosen to allocate all of the liabilities to a single time frame based on how frequently their net asset value (NAV) is calculated:

- ✓ AIFs with daily NAV: 100% of the fund allocated to the 2-7 day bucket (to take the settlement time into account);
- ✓ AIFs with weekly NAV: 100% of the fund allocated to the 2-7 day bucket;
- ✓ AIFs with monthly NAV (1 fund under Irish law): 100% of the fund allocated to the 8-30 day bucket;
- ✓ Funds closed to redemptions: 100% of the fund allocated to the >366 day bucket.

AMC 5 ensures liability diversification by using various indicators, in particular, the type of investor, proportion of internal investments, the concentration of the top five external investors and the size of the largest investor by type of investor.

The inspection revealed that at least once a month, AMC 5 carries out detailed monitoring of fund liabilities (data from transfer agents or from the group that centralises subscriptions and redemptions). An overview is provided to senior management during the monthly Risk Committee meeting. This AMC is the only one that reserves the right to activate "gates" for funds with less liquid assets (structured products/CDOs) and introduce notice periods for redemptions to avoid creating a lag between the value date of the cash received and the sale of securities. This right is then specified in the prospectus of the funds concerned.
Firstly, the funds avoid investments in illiquid positions, i.e. instruments that would be difficult to sell or for which there is no secondary market, and only invest in instruments previously authorised by the "New Instrument" committee, which examines the liquidity conditions of each security or derivative.

↗ The AMF notes the **good practices** of:

- ensuring that the proportion of poorly liquid or illiquid assets is consistent with the investment horizon, the options for investors to redeem their shares, and the liquidity management tools available to the AIF;
- ensuring detailed monitoring of fund liabilities, reported to senior management at a frequency appropriate to the AMC's reporting requirements;
- implementing redemption limits ("gates") for the least liquid funds, which must be detailed in the regulatory documentation.

↗ The AMF notes the **bad practice** of not documenting the monitoring of liabilities and ensuring their traceability.

➢ Stress tests

The AMCs conduct stress tests aimed at simulating a crisis situation (lack of liquidity of the AIF's assets and unusual redemption requests), as described in the educational guide "Using Stress Tests in Risk Management", published by the AMF in February 2017. The AMCs consider different scenarios that reflect market parameters and the financial instruments in the portfolio. These scenarios combine sudden market movements and the drying-up of liquidity with assumptions about investor redemption requests. The AMCs also use stressed prices and reduced trading volumes for the assets to be liquidated.

There are different approaches to stress testing:

- Stress tests use historical data to replicate past stressed market conditions;
- Stress tests operate by distorting asset parameters (e.g. bonds have their bid-ask spreads widened and equities are traded in restricted volumes) and by distorting portfolios by taking redemption requests into account.

These market stress scenarios, and their consequences for the funds' portfolio, are designed to ensure that investors are treated fairly, i.e. that an investor's exit is not to the disadvantage of the other investor(s), for example by using only the cash available. Compliance with this principle requires AIFMs to put in place the necessary measures to ensure that the fund portfolio is not distorted (e.g. the use of gates).

Each AMC uses different market parameters:

	Stress Test Assumptions
Bond spreads	100 bps increase (**AMC 4**) 200 bps increase (**AMC 1**) Unspecified widening of the bid-ask spread (**AMC 5**)
Risk-free rate	50 bps increase (**AMC 1**) 100 bps increase (**AMC 4**)
Share price	10% decrease (**AMCs 2 and 4**) 20% decrease (**AMC 1**) 12% increase and 15% decrease (**AMC 3**) Unspecified widening of the bid-ask spread (**AMC 5**)
Volume of shares held	20% of the average volume calculated over the previous 10 days (**AMC 6**) 20% of the average volume calculated over the previous 3 months (**AMC 2**) 20% of the average daily volume processed (**AMC 7**) 30% of the average volume over the previous 3 years (**AMC 8**)

The liquidity of the various assets is impacted differently for each AMC:

	Stress Test Assumptions
Futures contracts	None. Futures are traded under normal market conditions (**AMC 2**). The daily transferable volume is divided by 5 in times of stress. In a non-stressed market, the daily transferable volume is 10% of the average daily volume over the last three months, based on expert opinion (**AMC 8**).
Bonds	The liquidity of securities rated less than B- is zero, and their price is divided by 10 from the last known price; the liquidity of other government securities rated BB+ and better, and of other corporate securities rated BB- and better, is divided by 2 (bid-ask spread width, expressed as a price or rate, multiplied by 2; volume of transactions divided by 2) (**AMC 2**). In the non-stressed market scenario, **AMC 2** assigns a bid-ask spread to each type of bond. Bonds that meet these conditions are considered liquid overnight, regardless of the size of the position held by the funds, their holding ratio, and the volume of trading.
Convertible bonds	The liquidity of government securities rated BB or less and of corporate securities rated B+ or less is divided by 4 (bid-ask spread width, expressed as a price or rate, multiplied by 4; trading volume divided by 4) (**AMC 2**). In the non-stressed market scenario, **AMC 2** applies the same approach as for non-convertible bonds (see above).
Equity options	The daily transferable volume is divided by 5 in times of crisis (**AMC 8**). In a non-stressed market, the liquidation period for the position is 2 days, based on expert opinion.
Other options	The daily transferable volume is divided by 5 in times of crisis (**AMC 8**). In a non-stressed market, the daily transferable volume is 20% of the average daily volume over the previous month, based on expert opinion.
OTC derivatives (swaps, CDSs, forwards)	The daily transferable volume is divided by 5 in times of crisis (**AMC 8**). In a non-stressed market, the liquidation period used (to terminate or assign positions) is 1 day, based on expert opinion.

With the exception of AMCs 2 and 8, the assumptions used by the AMCs inspected were insufficiently explained and documented (AMCs 1, 3, 4 and 7). AMCs 5 and 6 make no distinction between liquidity management under normal market conditions and liquidity management under stressed market conditions. For AMC 6, liquidity management is based on internal stress tests, whereas the stress test needs to be adapted to the liquidity profile. Only AMCs 1, 2, 3 and 5 were able to confirm and justify the execution of these stress tests by presenting and documenting the results they had obtained.

The inspection task force noted that AMC 1 carries out stress tests according to a coherent and documented operational process: the traceability aspects of this process were made available by the AMC, which in this case consist of internal email exchanges between the risk management team and fund managers and screenshots of the Bloomberg data used for the construction of the stress tests.

↗ **Regulatory reminder:** The AIFM must adapt its stress tests to the liquidity profile of each fund managed pursuant to Recital 63 of Delegated Regulation 231/2013. The AMC must distinguish between liquidity management in normal market conditions and liquidity management under stressed market conditions (Article 48(2) of the AIFM DR). The AIFMs' procedures must provide for, define and oversee the carrying out of ex post tests to measure the risks to which the funds are exposed, using models based on estimates and forecasts, and to ensure compliance with the principle of fair treatment of investors (Articles 45(3)(c) and 48(2) of the AIFM DR).

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- ↗ The AMF notes the **good practice** of documenting the operational process for conducting stress tests and ensuring this process is traceable.
- ↗ The AMF notes the **poor practice** of not providing sufficient detail on stress test scenarios.

3.4 ESTIMATING LEVERAGE

Two methods are used to calculate leverage: the gross method (Article 7 of the AIFM DR) and the commitment method (Article 8 of the AIFM DR).

Reminder of the special rules for calculating leverage using the commitment method

Each derivative instrument position is converted into an equivalent position in the underlying asset of that derivative (Article 8(2) of the AIFM DR), subject to the specific cases set out below.

Strategies that use derivatives but do not increase the fund's leverage

By way of derogation from Article 8(2) of the AIFM DR, a derivative instrument shall not be converted into an equivalent position in the underlying asset (and therefore shall not increase the AIF's leverage):

- if it has all of the following characteristics (Article 8(4)): (i) it swaps the performance of financial assets held in the AIF's portfolio for the performance of other reference financial assets; (ii) it totally offsets the risks of the swapped assets held in the AIF's portfolio so that the AIF's performance does not depend on the performance of the swapped assets; (iii) it includes neither additional optional features, nor leverage clauses nor other additional risks as compared to a direct holding of the reference financial assets.
  - ➢ An example is a performance swap that involves swapping the performance of a basket of shares for the performance of a bond index.
- if it meets both of the following conditions (Article 8(5)): (i) the combined holding by the AIF of a derivative instrument relating to a financial asset and cash which is invested in cash equivalent that is equivalent to holding a long position in the given financial asset; (ii) the derivative instrument shall not generate any incremental exposure and leverage or risk.
  - ➢ An example is the combination of a money market portfolio and a CAC 40 future that creates a long position on the CAC 40.

Hedging rules

Hedging rules *"shall include combinations of trades on derivative instruments or security positions which do not necessarily refer to the same underlying asset and where those trades on derivative instruments or security positions are concluded with the sole aim of offsetting risks linked to positions taken through the other derivative instruments or security positions"* (Article 8(3)(b)). *"Derivative instruments used for currency hedging purposes and that do not add any incremental exposure, leverage or other risks shall not be included in the calculation"* (Article 8(7)). *"Hedging arrangements shall be taken into account when calculating the exposure of an AIF only if they comply with all the following conditions"* (Article 8(6)):

- *"the positions involved within the hedging relationship do not aim to generate a return and general and specific risks are offset;*
- *there is a verifiable reduction of market risk at the level of the AIF;*
- *the risks linked to derivative instruments, general and specific, if any, are offset;*
- *the hedging arrangements relate to the same asset class;*
- *they are efficient in stressed market conditions"*.

Duration method

"AIFMs managing AIFs that, in accordance with their core investment policy, primarily invest in interest rate derivatives shall make use of specific duration netting rules in order to take into account the correlation between the maturity segments of the interest rate curve" (Article 8(9)). These duration netting rules:[13]

- shall not be used where they would lead to a misrepresentation of the risk profile of the AIF;
- shall not generate any unjustified level of leverage through investment in short-term positions. Short-dated interest rate derivatives shall not be the main source of performance for an AIF with medium duration which uses the duration netting rules;
- shall convert interest rate derivatives into their equivalent underlying asset position and offset them in accordance with Annex III of the AIFM DR;
- shall allow an AIF to still make use of the hedging framework. Duration netting rules may be applied only to the interest rate derivatives which are not included in hedging arrangements.

The five AMCs provided the inspection task force with the source data on which their AIFM reports are based. Based on this data, which could only be partially audited because the source data was not complete (since internal procedures do not provide for traceability), the values reported by these companies in their reports for the financial years 2017 and 2018 were recalculated and then compared.

The figures for AMCs 1, 2 and 5 were identical between those recalculated from their files and those they reported to the AMF. However, there were relative discrepancies between these figures for AMCs 3 and 4, ranging from 2.7% to 3.5% for gross leverage and from 4.2% to 8.1% for leverage calculated using the commitment method (according to AMC 3, this was due to an input error and internal restatements of raw data; AMC 4 did not provide an explanation).

More generally, it should be noted that:

- the files for AMCs 4 and 5 were not sufficiently complete to be audited;
- the data from three AMCs contained errors (negative data for AMCs 3 and 4), incomplete source data (exchange rates) or data with different dates (AMC 2);
- AMC 3 regularly reported negative leverage.

↗ **Regulatory reminder** (Articles 7 and 8 of the AIFM DR): The exposure of an AIF, which can only be positive because it results from the sum of the absolute values of all positions, is calculated by the AIFM as follows: in accordance with the gross method, by excluding the value of any cash (and cash equivalents), cash borrowings that remain in cash, by including exposure resulting from the reinvestment of cash borrowings and positions within repurchase or reverse repurchase agreements, and by converting derivative instruments into the equivalent position; in accordance with the commitment method, by converting each derivative instrument position into an equivalent position in the underlying asset of that derivative, by applying netting and hedging arrangements, by calculating the exposure created through the reinvestment of borrowings (where such reinvestment increases the exposure of the AIF).

13 Article 11 of the AIFM DR.

↗ The AMF notes the **good practice** of retaining the data used to calculate leverage (for example, recording the exchange rate used in the reporting process), so that the AMC can perform controls to ensure the consistency of the data reported and the regulator can carry out its inspections.

3.5 CONTROLS PERFORMED

While all AMCs have a second-level control system, AMC 3 does not operate a second level of controls as it only ensures that the person responsible for second-level controls prepares and sends the AIFM reports (first-level control).

Only AMCs 3 and 4 have not carried out permanent and periodic controls on the AIFM reporting, as confirmed in the Compliance and Internal Control Officer's reports to the management teams. The absence of certain calculations and source data in these reports, however, made it impossible to corroborate the conclusions drawn in these reports on reporting compliance and adequate risk management.

↗ **Regulatory reminder:** Periodic[14] and permanent[15] monitoring of AIFM reporting that is operational, independent and effective helps AMCs, taking into account the nature, size and complexity of each AIF it manages, to ensure that the information reported is accurate and to implement corrective measures where necessary. These regulatory requirements thus ensure that AMCs monitor and manage risks on a regular basis[16] and, at the same time, are able to keep their executive management team informed.[17]

↗ The AMF notes that it is **good practice** to perform detailed checks, and document these checks, on the quality and accuracy of the data reported for all reports sent to the AMF.

↗ The AMF notes that it is **poor practice** for AMCs to fail to monitor and control the providers responsible for submitting AIFM reports and to fail to ensure that the information and documents relating to the AIFM reporting controls these providers have performed can be traced.

3.6 INFORMATION PROVIDED TO INVESTORS ON LEVERAGE AND LIQUIDITY

AMCs must disclose to investors the risks and level of leverage of the AIFs they manage. However, two AMCs did not provide clear information in this regard:

- The prospectus of one fund managed by AMC 3 did not explain the concept of "gross sensitivity" that it referred to. Neither did it specify the maximum leverage. In addition, the annual reports of two funds managed by this AMC contained imprecise information relating to the presentation of the levels of regulatory leverage (indicating a range with widely spaced boundaries and the potential to deviate from this range, but without providing more details);

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[14] Article 321-83 of the AMF General Regulation (AMCs partially subject to the AIFM Directive) and Article 62 of the AIFM DR (AMCs entirely subject to the AIFM Directive).

[15] Article 321-31 of the AMF General Regulation (AMCs partially subject to the AIFM Directive) and Article 61 of the AIFM DR (AMCs entirely subject to the AIFM Directive).

[16] Article 321-77 of the AMF General Regulation (AMCs partially subject to the AIFM Directive) and Article 38 of the AIFM DR (AMCs entirely subject to the AIFM Directive).

[17] Article 321-36 of the AMF General Regulation (AMCs partially subject to the AIFM Directive) and Article 60 of the AIFM DR (AMCs entirely subject to the AIFM Directive).

- For calculating leverage, the prospectus of a fund managed by AMC 4 referred to the ESMA guidelines for UCITS and not to those for AIFs,[18] without specifying which of the methods referred to in that document was used. Furthermore, by referring to the UCITS Directive in an AIF's prospectus, this AMC did not clearly inform investors about how leverage is defined and calculated.

Regulatory reminder: The AIFM must provide clear, understandable and accurate information to investors:[19]

- in the AIFs' annual reports, the structures of the AIFs concerned, and their risk profile, i.e. the measures to assess the sensitivity of the AIF's portfolio to the most relevant risks to which the AIF is exposed and whether the risk limits set by the AIFM have been or are likely to be exceeded;[20]
- in the AIF's periodic reporting (at least annually), the total amount of leverage calculated in accordance with the gross and commitment methods employed by the AIF;[21]
- in a document made available to investors prior to their investment, the risks associated with the investment strategy and objectives, the types of assets in which the AIF may invest, the circumstances in which leverage is used (types and sources of leverage, restrictions, possible reuse of collateral, total amount of leverage and change in its maximum level) and liquidity risk management.[22]

[18] CESR, *"Guidelines on Risk Measurement and the Calculation of Global Exposure and Counterparty Risk for UCITS"*, 10-788.
[19] Article L. 533-22-2-1 of the Monetary and Financial Code and Article 103 of the AIFM DR, which ties into Article 23(4) of the AIFM Directive; Article L. 214-24-19 of the Monetary and Financial Code.
[20] Article 108 of the AIFM DR.
[21] Article 109 of the AIFM DR.
[22] Article 23 of the AIFM Directive, Article 421-34 of the AMF GR, AMF Instructions 2011-20 and 2012-06.