AFG-AFTI guide to performance fees for UCITS and retail investment funds

November 2018
**The French Asset Management Association** (Association Française de la Gestion financière, AFG) is the professional organisation representing the French asset management industry. Asset management is about helping retail and professional investors to provide for their future and achieve other long-term goals. Individuals and organisations entrust their savings to asset managers, who seek to increase their value by investing in the real economy via companies’ shares or bonds, government bonds, and infrastructures’ assets.

The French asset management sector is the largest in continental Europe: 630 asset management companies employ directly and indirectly 85,000 people and invest on behalf of their clients up to 4,000 billion euros in bonds, shares and other assets. More than 50% of the management companies distributes their funds abroad. More than 30% of the assets managed by our members are issued by corporates or states of the Euro zone (excluding France), which makes our industry a key source of funding for the European economy.

AFG is an active member of EFAMA and PensionsEurope.

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**The Association Française des Professionnels des Titres** (AFTI) is the leading association representing post-trade businesses in France and Europe.

AFTI has over 100 members covering a wide range of activities, including market infrastructures, custodians, account holders and depositaries, issuer services providers, as well as reporting and data providers.

All together, they employ about 28,000 people in Europe of which 16,000 are in France. Members acting as financial intermediaries account for 26% of European custody activity, with €55.6 trillion in assets under custody and 25-30% of the European fund asset servicing sector (depositaries and fund administrators). In addition, in 2017, French market infrastructures settled 29 million instructions (CSD) and cleared 730 million transactions (CCP).

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AFG-AFTI guide to performance fees for UCITS and retail investment funds

The French asset management industry offers a wide range of investment management solutions, enabling it to meet different investment objectives for different investors.

Some collective investment schemes (CIS) offered in France have fee structures that include performance fees. These structures aim to ensure better alignment between the interests of investors and asset management companies, with a view to outperforming a predefined index or exceeding a predefined threshold.

This guide reiterates how important it is for the methods used to calculate performance fees to comply with the principles set out by IOSCO1 in 2016. Performance fees levied by open-ended collective investment schemes must reflect as accurately as possible the returns generated by management and seek not to put investors at a disadvantage when returns are distributed.

The AFG (French Asset Management Association) and AFTI (French Association of Securities Professionals) have compiled a list of best practices for the implementation of performance fees for French UCITS and non-dedicated retail investment funds. This common guide aims to promote some examples of French standards for methods and practices relating to operational implementation that are considered relevant and desirable, with a view to ensuring better alignment between the interests of investors and asset management companies. This guide relates to some of the French CIS that are marketed to non-professional investors: UCITS and non-dedicated retail investment funds. A second guide will be published covering the remaining funds that are open to non-professional investors.

This guide is in two parts:

• the first part deals specifically with the principles of the methodology used to calculate performance fees;
• the second part is more concerned with the technical aspects of the application of performance fees.

1) IOSCO “Good Practice for Fees and Expenses of Collective Investment Schemes” FR09/16.
## 1. Principles of the methodology used to calculate performance fees for open-ended CIS

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### ANNEX

**Annex Performance Fees AFTI Summary Sheet**

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1. Principles of the methodology used to calculate performance fees for open-ended CIS²

Foreword

Asset management companies can choose to introduce, in addition to a fixed management fee, a performance fee consisting of an amount accruing to the management company, which is determined based on the performance of the CIS concerned in relation to its investment management objective.³

The positive effect of this system is that it allows the interests of the asset management company to be aligned with those of investors and with the declared investment management objective of the CIS, by interesting the asset management company directly in the fund’s performance in relation to a relevant performance objective.

In order to be perceived, however, these beneficial effects require an appropriate calculation method to be used. We should also point out that practices in France in this area still vary widely.

With French and European regulators paying increased attention to the subject of performance fees, the AFG and AFTI have decided to publish this professional guide, which aims to:

• Provide a reminder of regulatory requirements in this area, particularly the good practices set by IOSCO and transposed into standards by the French Financial Markets Authority (AMF);
• Identify a number of best practices observed in France in terms of calculation methods and communication with investors;
• Present a standardised list of characteristics of these calculation methods, to facilitate exchanges between concerned parties.

Given the diverse range of situations, this document will of necessity present a generic approach focusing on the most commonly encountered problems, without anticipating specific circumstances that may justify the adoption of different practices in individual cases.

As a general rule, the methods used and the implementation of a performance fee system are ultimately the responsibility of the asset management company, in accordance with the provisions of the AMF’s general regulation and related legal texts. The asset manager controls the various elements of the method chosen and all of its effects. We would also like to point out that the existence of a performance fee system must not be regarded in isolation, but as one of several elements in the asset management company’s remuneration structure. In particular, the calibration and proportionate nature of the parameters used in the method for calculating performance fees must be understood in their entirety.

²) These principles are intended to apply to funds (or categories of units) open to retail investors: UCITS and non-dedicated retail investment funds. To make this document easier to read, the term “fund” will often be used as a generic term covering the various structures of CIS.

³) This guide does not include certain types of variable remuneration such as an “equalisation reserve” used by funds whose liabilities are held exclusively via a register of names, or “liquidation surpluses” in the context of “carried interest”.
The document will provide a reminder of regulatory references in the first section, briefly list the main elements of a method of calculating performance fees, list the basic principles that must be observed and then present various examples of methods that generally comply satisfactorily with these principles.

Regulatory references

Extracts from the General Regulation of the AMF in force as at 03/01/2018

Article 319-13

The management fee referred to in Article 319-12 may include a variable portion tied to the outperformance of the alternative investment fund (AIF) relative to the investment objective, provided that:

1. It is expressly provided for in the key investor information document or, failing this, in the information document for investors in the AIF;
2. It is consistent with the investment management objective as set out in the prospectus and the key investor information document or, failing this, in the information document for investors in the AIF;
3. The share in the outperformance of the AIF allocated to the asset management company must not induce that company to take excessive risk with regard to the investment strategy, investment objective and risk profile set out in the prospectus and the key investor information document or, failing this, in the information document for investors in the AIF.

Article 321-118

The management fee referred to in Article 321-116 may include a variable portion tied to the outperformance of the UCITS in relation to the investment objective, provided that:

1. It is expressly provided for in the key investor information document of the UCITS;
2. It is consistent with investment management objective set forth in the prospectus and the key investor information document of the UCITS;
3. The share of outperformance of the UCITS allocated to the asset management company must not induce that company to take excessive risk with regard to the investment strategy, investment objective and risk profile set forth in the prospectus and the key investor information document of the UCITS.
Extract from AMF position 2012-12, A guide to fees

2. Performance fees

This Article 2 applies to fund management companies governed by Section 1 and Section 1 bis of Volume III of the AMF’s general regulation.

Pursuant to the principles set out by IOSCO\(^4\) in November 2004 (principle reiterated in Articles 314-78 and 319-13 of the AMF’s general regulation), which must be complied with by all members of IOSCO, management fees charged to a fund may include a variable part where:

1. It does not incite the asset management company to take excessive risks in the hope of increasing the performance of the UCITS or AIF;
2. It is compatible with the performance objective and risk profile of the fund, which was previously presented to the investors;
3. The calculation of the performance can be verified to prevent any potential manipulation. In this context, the payment frequency set by the asset management company shall be reasonable. It should be noted that a twelve-month period is considered reasonable;
4. It does not breach the principle of equal treatment of investors;
5. Investors know that there is an outperformance fee and are aware of its potential impact on the performance of the UCITS or AIF.

2.1. Payment frequency

Pursuant to the afore mentioned principles, the calculation of the performance shall be verifiable in order to prevent any manipulation. In this context, the payment frequency set by the asset management company shall be reasonable. It should be noted that a twelve-month period is considered reasonable. Accordingly, a sampling period of less than one year shall not be considered adequate.

2.2. Outperformance share

The asset management company shall provide the AMF with a technical note as soon as the outperformance share that may be granted to it exceeds the 30% threshold. This note aims at documenting the scheme in its entirety, in particular by providing details about the scheme implemented in order to avoid that excessive risks be taken.

Below 30%, the AMF may ask the asset management company for a technical note as soon as it considers that the level of the outperformance share could result in important risks being taken and/or that it could prove incompatible with the management objective and risk profile of the UCITS or AIF.

\(^4\) International Organisation of Securities Commissions (IOSCO) is an international organisation founded in 1983 that brings together the regulators of the world’s main stock exchanges.
Extracts from the final report IOSCO FR09/16, Good Practice for Fees and Expenses of Collective Investment Schemes

**Good practice 2**

A regulatory regime that permits performance fees should set standards for:

- their method of calculation;
- the information the CIS operator should disclose to investors about their use;
- the disclosure medium to be used.

In any event, a performance fee should respect the principle of equitable treatment of investors.

**Good practice 3**

A performance fee should be consistent with the investment objectives of the CIS and should not create an incentive for the CIS operator to take excessive risks in the hope of increasing its own remuneration. To that end:

- the calculation of a performance fee should be verifiable and not open to the possibility of manipulation; in particular, the following items should be unambiguously determined:
  - how investment performance will be assessed (i.e. including or excluding subscription and redemption fees, etc.);
  - what reference benchmark will be used;
  - what the calculation formula will be (including a description, if applicable, of the method for offsetting gains against past losses).
- the frequency for crystallising the performance fee and transferring the amount earned in such fees to the CIS operator should not be more than once a year, except when the CIS operator uses a fulcrum fee model (see below).
- any benchmark to which the performance of the CIS is to be compared should be verifiable and provided by an independent party.

CIS operators should design calculation methods allowing for the performance fee to result in a value that is proportionate to the investment performance of the CIS. Calculation methods should not deny investors an adequate share of the return achieved from the risks taken on their behalf and previously accepted by them.

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5) Generally, it may not be considered good practice for the CIS operator to be allowed to create its own benchmark (even if independently verifiable) or to use one created by an affiliated party.
**Good practice 4**

Where the calculation of the performance fee is based on the fulcrum fee model:

- the calculation of the fee is compared to an appropriate benchmark and is based on the same benchmark used to determine excess performance;
- the fee increases or decreases proportionately with the investment performance of the CIS over a specified period of time; and
- the CIS’s investment performance should be calculated on the CIS’s net asset value, calculated net of costs.

Where the performance of the CIS is not based on a fulcrum fee model but is measured with reference to a benchmark:

- calculation of the fee is based on the same benchmark used to determine excess performance;
- the excess performance is calculated net of costs.6

**Good practice 5**

It remains important for investors to be adequately informed of the existence of the performance fee and of its potential impact on the return that they will get on their investment.

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6) The “excess performance” should be the difference between the net performance of the portfolio and the performance of the benchmark.
Nomenclature

Any given method of calculating performance fees includes the following elements (specific calculation methods may require additional elements for a full description):

1. **A reference (or crystallisation') period** for which the performance (and excess performance) of the CIS will be calculated, and indicating the frequency at which the calculated provision definitively accrues to the asset management company. At the end of this reference period, the provision for performance fees becomes payable to the asset management company and its status changes to “payment pending” from an accounting viewpoint. The reference values used in calculating performance are updated for the following period. The reference period cannot be less than 1 year. The reference period is usually based on the fund’s accounting period.

2. **A method of calculating performance and excess performance** for the reference period. This performance can be measured by comparing the evolution of the net asset value of the fund with that of the benchmark index or by comparing the amount of excess performance that unit holders have effectively benefited from for the period with a notional asset with the same performance as the benchmark indicator. Depending on the method used, this can take the form of a rate (percentage growth in the value of the fund) or an amount in the currency used by the fund.

3. **A reference indicator**, the performance of which will be compared with that of the CIS to calculate the excess performance of the CIS. This reference indicator may take the form of a market index (with or without a performance surplus) or a target annual return. All information about the nature of the index must be available. In the case of composite indices in particular (i.e. those comprising several market indices), the proportions of the market indices that go into them and the frequency at which they are rebalanced must be determined in advance and indicated in the prospectus. In the event that the benchmark index unexpectedly ceases operating, the asset management company shall implement the appropriate continuity plan defined in accordance with the “benchmark regulation”. The performance of the previous index and the new index will be linked until the end of the current reference period.

4. If excess performance is calculated as a percentage, we shall also define the **base** to which it is applied in order to determine the excess performance in the fund currency. This base will generally be the net assets of the CIS after management costs but before provisions for performance fees.

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7) Crystallisation involves freezing a sum that has been set aside as a provision and thus regarding it as definitive and due for payment. This covers the amount of the performance fee, which, at the end of a reference period, changes its status from a provision made by the fund administrator to an amount due to the asset management company, as well as redemption fees.

8) Excess performance occurs when the fund’s performance exceeds that of the benchmark indicator against which it is being compared.

5. A **provisioning rate**, which is applied to excess performance in the fund currency in order to determine the amount of the provision. This provisioning rate must not exceed 30%, unless an exception is justified.

6. A **description of how redemptions are processed** where there is an existing provision: the provision associated with redemptions can accrue to the asset management company or the fund, for example. Moreover, a breakdown of subscriptions/redemptions for this calculation can be shown net (the amount of redemptions remaining after deduction of subscriptions received) or gross (the total amount of redemptions received). If the fund is subject to a “swing pricing” system, the provision must be taken into account separately from adjustments to the net asset value linked to the flows in subscriptions or redemptions.

7. A **potential mechanism for compensating** for past underperformance (or negative performance).

8. A **catch-up period**, at the end of which the mechanism for compensating for past underperformance (or negative performance) can be reset. This period cannot be less than 1 year, which is generally an appropriate period in the context of collective management in the form of UCITS and/or non-dedicated retail investment funds. Factors that must be taken into account in analysis relate to the investment policy, the recommended investment period, the risk profile and the stability of investors’ holdings in the CIS.

9. Any other factors that enable calculations to be replicated, particularly:
   a. The existence of a cap on provisions (upper limit on the amount that can be collected by the asset management company, as an amount or a percentage of assets). If the cap is a percentage of assets, the base must also be specified as part of the description of the calculation method (assets on the previous day or average assets for the accounting period);
   b. The existence of a constraint in terms of positive performance, in addition to the constraint of excess performance.

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9) The AFG considers the use of the term High Watermark to be inappropriate in the context of methods used to calculate performance fees for open-ended funds. This is a special type of compensation mechanism that is specifically adapted to funds that use series accounting (or the equalisation method).
Below is a table summarising the standard elements to be included in the description of methods provided in the prospectus and in communications with fund administrators:

<table>
<thead>
<tr>
<th>Reference (or crystallisation) period</th>
<th>Minimum 1 year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Specify the observation period that determines how frequently the provision is crystallised and thus accrues to the asset management company.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Date of first collection</th>
<th>For a new fund or a new class of units, specify the date on which performance fees will first be collected (1 year or more)</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Calculation method</th>
<th>Unambiguous and verifiable</th>
</tr>
</thead>
<tbody>
<tr>
<td>Specify the type of method (e.g. the “indexed asset method”, “daily variation”, “systematic offsetting”, other) and give details of how it works (e.g. if a method of the “indexed asset” type is used, define the reference asset).</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Provisioning</th>
<th>For each calculation of NAV</th>
</tr>
</thead>
<tbody>
<tr>
<td>Specify that provisioning takes place each time NAV is calculated. Specify the rules for constitution of provisions, provisions accrual from one NAV calculation to the next until crystallisation and reversal of provisions (and in particular that reversals of provisions are capped at the level of previous allocations). Specify how provisions are dealt with at the close (paid out in full or in part to the fund management company).</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Reference indicator</th>
<th>Reference indicator (with or without the requirement to out-perform it) or Fixed performance target (› 0)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Specify, for the index, the name, type of data (net return, total return, price index, etc.) and type of price (opening, closing, other), composition (for a composite index) and frequency of rebalancing.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Calculation base</th>
<th>This must be net of costs applied to the CIS (other than the provision for performance fees itself, which may or may not be deducted from the base depending on the method used), particularly fixed management fees</th>
</tr>
</thead>
<tbody>
<tr>
<td>Specify the calculation base.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Provisioning rate</th>
<th>Generally &lt;= 30%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Specify the provisioning rate and the fact that it is identical for the constitution and reversal of provisions.</td>
<td></td>
</tr>
</tbody>
</table>

| Processing of redemptions | Specify whether the portion of the constituted provision that corresponds to the redeemed units has definitively accrued to the asset management company, including in the event of subscription/accounting redemption by the same client. |

<table>
<thead>
<tr>
<th>Compensation for underperformance (or negative performance)</th>
<th>If applicable Unambiguous and verifiable</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Catch-up period</th>
<th>› = Observation period Minimum 1 year</th>
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</table>

<table>
<thead>
<tr>
<th>Other specific forms of treatment</th>
<th>Positive performance constraint Maximum amount of provision (and calculation base if relevant)</th>
</tr>
</thead>
</table>

AFG-AFTI guide to performance fees for UCITS and retail investment funds

1. / Nomenclature

November 2018
Fundamental principles underlying the calculation of performance fees

Fair treatment of investors

Other than the method that involves calculating performance fees individually based on each holder’s subscription and redemption dates, which is generally rarely used in practice, we would firstly like to note that a perfect method does not exist.

Given the inflows and outflows during the observation period, each investor will in fact have the same amount deducted for performance fees (as all units in the CIS are identical), even though they may have had a different performance from all other investors, depending on the respective subscription and redemption dates.

The regulator acknowledges that this is not possible, and has thus proposed the following standard (reiterated in the recent review of fees charged in 201511):

- Transfers of wealth between unit holders must be limited as much as possible;
- The method used to calculate performance fees must not unduly enrich the asset management company.

Preference should therefore be given to methods that, as a minimum, avoid a negative effect leading to an increase in the provision for performance fees simply through the addition of a new subscription. This increase in the provision is to the detriment of existing holders, whose performance is diluted, and of new holders, who will contribute to the constitution of a provision based on excess performance that they have not benefited from.

In particular, this excludes the method based on comparing the performance of the fund with that of the index when performance is calculated simply as the ratio of Net Asset Values at the beginning and end of the accounting period (“reference NAV” method). This method automatically leads to an increase in any preexisting provision in the event of a new subscription, unless the method includes a specific mechanism for correcting these volume effects.

On the other hand, it should be noted that this leads to a transfer between existing and new holders, as new holders will benefit from the preexisting provision if the excess performance of the CIS is reduced (as reversals of provisions will offset the relative decline in performance, while new holders have not contributed to the constitution of this provision). This is acceptable if transfers of wealth between holders are limited as far as possible.

11) AMF 2018 : Study on the fees charged in 2015 by UCITS distributed in France.
No incentives to take excessive risks

A method of determining performance fees must not result in excessive risks being taken. The following approaches, by way of example, may help to achieve this objective:

• Linking risk-taking by management with a risk of penalization of the capacity to generate performance fees. This could translate into an option for the asset management company not to make any provisions as long as any cumulative underperformance during the catch-up period has not been offset.

The definition of the catch-up period would then be a decisive factor. The asset management company must be able to reset its calculation after a certain time if it has become difficult or even impossible to restore an excess performance. Nevertheless, a minimum catch-up period is necessary in order to prevent excessive risk-taking. The minimum catch-up period may not be less than one year.

• Imposing an upper limit on the provision that the asset management company can deduct, which must be consistent with the risk profile of the portfolio.

The rate of allocation to the provision that is applied in the event of an increase in the excess performance must be equal to the rate of reversal applied in the event of a reduction in the excess performance. If the reversal rate were lower than the allocation rate, this would favour the fund management company to the detriment of the fund.

Compatibility of methods used with the investment objective and the risk profile of the CIS

The performance of the CIS that is used as the basis for calculating performance fees must be compared with a relevant reference, taking into account the objective and the management style of the portfolio. In particular, the risk levels inherent in the fund and the reference must be similar. This principle means that appropriate references must be chosen for the calculation of performance fees, i.e. they must be compatible with those expressed in the investment objective, although they do not necessarily have to be identical.

As an example, it is advisable not to use a fixed threshold (zero risk) or a money market benchmark index (low risk) to calculate the excess performance of a CIS that invests in shares (high risk). However, this type of indicator can be used to calculate the excess performance of a CIS that aims to generate an absolute performance, insofar as the potential performance of the fund and the trigger threshold are consistent and there is no structural directional bias in the strategy implemented.

Verifiability of calculations and information for investors

By verifiability, we mean that the calculation method must make use of independent data sources (for the levels of indices, for example) and that its application must be non-discretionary.

An observer with access to all the information (indices, subscriptions and redemptions, etc.) and the characteristics of the method will thus be able to recalculate provisions deterministically. However, this does not imply that any unit holder will be able to replicate these calculations,
insofar as the necessary information may not be public (particularly subscriptions and redemptions, which are required for calculating provisions in the indexed asset method).

Furthermore, investors should ideally be informed via the prospectus:

- Of the existence of a performance fee and the method used to calculate it, which must enable the fee to be verified, by outlining all the characteristics of the method chosen, as stated above;
- Of the potential impact of the fee on the fund, for example by presenting a few simple scenarios. It is possible to emphasise that the performance fee will be deducted only if the CIS effectively overperforms (in accordance with the chosen method) for the observation period. However, it would be necessary to specify that this principle may not apply to the investor if the period of his investment in the fund does not coincide with a reference period. When excess performance scenarios are presented\(^{12}\), a scenario demonstrating that the fund may levy a performance fee even if the investment has declined in absolute value should also be presented if the method allows such an effect;
- Of systematic biases between unit holders that the calculation method may cause; for example, other than the “equalisation reserve” method, a potential transfer from existing holders to new holders in the event of a pre-existing provision (as the provision that is “given” to new arrivals may be used to offset potential underperformance in future).

### Additional points relating to the treatment of events that occur during the lifetime of the fund

In all of the following cases, the principle that must guide the asset management company in its choice of treatment must be to avoid an abrupt change in net asset value and to select a method that does not put the fund at a disadvantage in a systematic and foreseeable way.

Whenever possible, substantial modifications made on the closing date of the reference period must allow any problems linked to the calculation and treatment of performance fees to be avoided:

- Change of reference indicator during the reference period;  
  If the reference indicator changes during a reference period, the performance of the reference indicator for this period will be calculated by linking the benchmark index that was previously in force until the date of the change and the new reference indicator used afterwards.
- Creation of a new share class during the reference period;
- Close of a share class or dissolving of the fund;
- Merger/absorption of the fund with/by another fund.

More details of events that can occur during the lifetime of the fund are included in the second part of this guide.

\(^{12}\) The presentation of scenarios is optional. When a decision is made to present them, this cannot be an exhaustive exercise. As the objective of scenarios is to provide an illustration, all possible scenarios cannot be presented.
Examples of methods

This section lists examples of methods used in France that demonstrate characteristics presumed to comply with the criteria of existing regulations and the good practices in this guide. It is important to note that this list is not exhaustive and that there may be variations on the methods presented here.

Indexed assets method (“indexed assets”)

We shall illustrate what we have discussed by explaining the indexed assets method below, which we believe satisfies regulatory requirements and complies with the best practices listed in this document.

**Principle and method of calculation**

The performance of the fund is regarded as the creation (or destruction) of value generated in the fund currency. This amount is compared with the creation or destruction of value that a similar investment in a structure equivalent to the reference indicator would have generated.

The method thus involves calculating an indexed asset, which represents the net assets of a virtual fund that has experienced the same flows of subscriptions and redemptions as the fund for which we are calculating the fee, and the performance of the reference indicator.

This indexed asset can be calculated using the formula below (ignoring the treatment of any detachment of coupons by the fund):

\[
IA_t = (IA_{t-1} + Sub_{t-1} \times NAV_{t-1} - Red_{t-1} \times VL_{t-1}) \times \frac{I_t}{I_{t-1}}
\]

Where:

- \(IA\) is the indexed assets (in euros);
- \(I\) is the level of the reference indicator;
- \(Sub\) and \(Red\) are subscriptions and redemptions in number of units;
- \(VL\) is the indexed assets \(IA\) divided by the number of units in the fund;
- \(NAV\) is the Net Asset Value (i.e. after provisioning).\(^{13}\)

The calculation base for the provision is then simply the difference between the fund’s net assets (to which the provision for the performance fee for the previous day is added back) and the indexed assets.

The level of the provision for the performance fee is obtained by applying the provisioning rate to this base.

\(^{13}\) If the fund is subject to a “swing pricing” mechanism, this NAV must be taken into account without the potential upwards adjustment occurring in case there is a significant volume of subscriptions.
Bias of the method

One consequence of the indexed asset method is that if a subscription takes place when there is already a provision for the performance fee, this provision will not change. It must therefore be ensured that there is no possibility of an unfair gain in favour of the asset management company.

On the other hand, this means that if the fund underperforms after this date, a new holder will benefit from the offsetting effect of the provision associated with his units (the provision will decrease when excess performance reduces the gross underperformance of the fund). This provision will thus have been constituted to the detriment of the provision associated with units of existing holders at the time of subscription.

Secondly, the indexed asset method can be considered to work by minimising the total discrepancy between the provision associated with each unit and the provision that would have been associated with the same unit if the fee had been calculated based on its performance alone. This works by calculating what the provision for the “average” unit in the fund would be and attaching this to all units in the fund.

A consequence of this is that there may be transfers of wealth between different categories of holders, depending on the extent and timing of movements in liabilities.

These two types of wealth transfers between holders are considered acceptable as they are limited as far as possible.

On the other hand, this method has the advantage, compared with the “reference NAV” method (cf. example below), that it does not generate a provision simply because of subscriptions occurring when a provision already exists (volume effect). We can illustrate this by looking at what happens to the NAV and the provision in the event of a subscription when there is already excess performance. We will look below at the example of a fourth holder who buys a unit in a UCITS in which there had previously been three holders and that had generated an excess performance before the arrival of this new holder.

Impact of a subscription – Initial situation

Investment in the fund by a new holder. The three existing holders have already benefited from excess performance (represented by the total of the two sections in green and orange), which has given rise to a provision (represented by the section in orange). The new holder enters at the net asset value (1,400).

(Figure 1 Example of the impact of a subscription - initial situation Source AFG)

14) As already mentioned, this is a common characteristic of methods that do not apply a performance fee to each individual subscription.
Impact of a subscription – “Indexed Asset” method

The calculated excess performance, and thus the total provision, are not impacted by the arrival of the new holder. The provision per unit thus decreases in proportion to the size of the subscription. Each existing holder contributes to the constitution of a provision for the new unit. The net asset value is not affected. The constitution of this provision means that the new unit has a buffer in the event of future underperformance. In return, the provision associated with units of existing holders will be reduced by 25%, reducing their potential for offsetting.

(Figure 2 Example of the impact of a subscription - “Indexed Asset” method Source AFG)

Impact of a subscription – “Reference NAV without cancelling out the volume effect” method

In accordance with this method, excess performance is calculated based on changes in the net asset value per unit and then applied to all of the fund assets. The performance per unit is therefore recalculated in its entirety based on the new gross assets per unit. It will now be lower, as the new gross assets per unit are lower than previously. Nevertheless, as this performance is then applied to each unit in the fund to calculate the total provision, the latter will increase significantly as a result of the new subscription. The net asset value will decline as a result, in the absence of any other events apart from the subscription. As a result of this “volume effect”, the remuneration of the fund management company increases even though no excess performance has been generated since the last subscriptions.

(Figure 3 Example of the impact of a subscription - “Reference NAV” method Source AFG)
Method involving the systematic offsetting of the volume effect of subscriptions (“systematic offsetting”)

An alternative to the indexed asset method that is based on observation of NAV also satisfies regulatory requirements and complies with the best practices listed in this document.

Principle and method of calculation

This method is based on the same principles as the “reference NAV” method, but it corrects the volume effects that the latter causes.

The provision for performance fees is determined by the rate of performance fee multiplied by the fund’s excess performance in relation to its index multiplied by the number of units in circulation. If no mechanism is in place to cancel out the volume effect of subscriptions, an increase in the number of units will automatically lead to an increase in the provision for performance fees. The cumulative amount of the volume effect of subscriptions is therefore systematically deducted from this provision. The new amount that is thus obtained then corresponds to the effective provision for performance fees.

The amount of the current volume effect of subscriptions is equal to the share of the latter (in relation to the total number of units) in the effective provision for performance fees. This amount is added to the cumulative amount used to offset the volume effects of subscriptions. The cumulative amount used for offsetting is capped at the theoretical maximum amount of the provision for performance fees before applying the offsetting mechanism.

i.e. Effective Prov.\(_T\) = Prov.\(_T\) - Total Offsetting\(_T\)

where Prov.\(_T\) = Rate of Performance Fee x (Excess Performance\(_T\)) x Unit\(_T\),

with Excess Performance\(_T\) = Perf. Fund\(_T\) – Perf. Index\(_T\),

and Cumul Neutralisation\(_T\) = Neutralisation\(_T\) + Min (Cumul Neutralisation\(_{T-1}\); Prov.\(_T\))

with Total Offsetting\(_T\) = Offsetting\(_T\) + Min (Total Offsetting\(_{T-1}\); Prov.\(_T\))

Bias of the method

On the other hand, and as before, if the fund underperforms after a new subscription, a new holder will benefit from the offsetting effect of the provision associated with his units (the provision will decrease when excess performance declines). This provision will thus have been constituted to the detriment of the provision associated with units of existing holders at the time of subscription.

This is acceptable for transfers of wealth between holders that are limited as far as possible.
Daily provision method ("daily variation")

Another method that arrives at a comparable result to those above is the calculation and recognition of provisions each time the NAV is calculated, depending on excess performance since the last time the NAV was calculated.

This method is as valid as those above in terms of the treatment of unit holders and in particular in terms of limiting potential unfairness between holders and the asset management company.

In order to ensure that any past underperformance is offset, it requires a virtual negative provision to be stored, if applicable, throughout the catch-up period, even though the crystallisation of the provision at the end of the reference period remains at a minimum of zero.

The calculation is carried out as follows:

\[
\text{Effective}_\text{Provision}_t = \text{Max}(0, \text{VP}_t)
\]

\[
\text{VP}_t = \text{VP}_{t-1} + \text{Provision}_\text{Day}_t
\]

\[
\text{Provision}_\text{Day}_t = \text{Base}_t \times (\text{Perf}_\text{Fund}_t - \text{Perf}_\text{Index}_t) \times \text{Rate}_\text{Provision}
\]

Where:

- \text{Base}_t\text{, is the calculation base for the provision on day } t\text{, generally the net assets of the fund before provisions for the performance fee.}

- \text{VP}_t\text{, the virtual provision on date } t\text{, can be positive or negative. It is reset to zero when a provision is deducted at the end of an observation period, or, if there is no deduction, at the end of the catch-up period. The virtual provision is kept and used for the calculation, but no real provisions are made. The amount of the provision effectively made as at date } t \text{ is equal to } \text{Effective}_\text{Provision}_t\text{.}

- \text{Perf}_\text{Fund}_t\text{ and } \text{Perf}_\text{Index}_t\text{, are the performance of the fund and the index since the last time the NAV was calculated, i.e. } \text{NAV}_t \text{ / } \text{NAV}_{t-1} \text{ for the fund and } I_t \text{ / } I_{t-1} \text{ for the index, where NAV is the NAV after reintegration of the provision for performance fees and } I \text{ is the level of the reference indicator.}
Illustration of certain aspects of different methods

The following example illustrates some of the effects that different methods can have. The example concentrates on two effects in particular:

- The “volume effect”, which occurs with the above-mentioned “reference NAV” method in particular;
- The effect caused by the “variable factor” method, which involves having a rate of reversals on provisions that is lower than the rate of allocation to the provision and underlines the disadvantages these have for unit holders.

These two methods are presented in the second graph (showing changes in the total amount of provisioning), along with two other methods that do not have any significant bias:

- The “indexed asset” method. It should be noted that in this case, as is generally the case, there is no difference in the amount of provisioning between the “indexed asset”, “systematic offsetting” and “daily variation” methods;
- The “equalisation reserve” method, which involves following each unit issued separately (and therefore calculating a different provision for each date on which units were subscribed to). Owing to its complexity and burden to implement, this method is in practice reserved for certain types of funds that are not valued frequently (typically “hedge funds”) and is not covered by this guide.

Presentation of example

The graph below shows changes in the fund’s excess performance (equal to its performance: benchmark flat) over time and the number of units.

In total in (3), before the effects of the provision for performance fees:

- the performance per holder is as follows:
  - holders 1: for 1,000 units subscribed to at a NAV of €100, there was an excess performance of 5% (€+5,000);
  - holders 2: for 1,000 units subscribed to at a NAV of €110, there was an underperformance of 4.55% (€-5,000).
- the performance for all holders (or performance of net assets) is zero (€+5,000 - €-5,000);
- excess performance measured by the net asset value is 5%.

15) In reality, holder 2 subscribes on the basis of the NAV after provisioning in (2). However, taking this into account makes calculations more complex without changing the reality of the mechanisms in place. To simplify matters, we regarded holder 2 as having subscribed here on the basis of the NAV before provisioning.

16) Relative reduction in NAV before provisioning from €110 to €105.
Comparison with other methods

The graph below compares the variable allocation rate method with the indexed asset method, the equalisation liabilities method and a method bearing a volume effect.

![Comparison of provisioning methods](image)

In this graph, the variable factor and equalisation reserve methods are combined.

[...]

Analysis of effects of the variable allocation factor method

The variable allocation factor method does not correct any remaining unfairness and, as the examples show, actually widens inequalities between holders:

1. the variable allocation rate method (€500 deducted) leads to a larger provision for the fund management company than the indexed asset method (€0, as the overall excess performance that holders have benefited from is zero);

2. in this example, holders who have invested in (1) will not get back the full fee that they have funded in a downward phase, insofar as the fund management company will refund only part of it. These holders will thus suffer losses on two fronts;

3. with the variable allocation factor method or the indexed assets method, holders who have invested in (2) benefit in both cases from the “offsetting” effect of the provision on NAV, although for a smaller amount with the first method (as the remainder goes to the asset management company and not to unit holders).

As explained above, this residual inequality is unavoidable unless methods of the “equalisation liabilities” type are used.

Moreover, the “corrective” factor can depend on subscriptions to the fund and therefore varies widely in open-ended funds. The effect illustrated above of asymmetrical allocations to and reversals of provisions may in reality be higher or smaller for open-ended funds receiving several subscriptions during a period of excess performance; successive variations in the corrective factor can accumulate.
2. Technical aspects of the application of performance fees

General aspects

The principle of performance fees (or variable management fees) is based on the fact that the asset management company is able to link part of its remuneration to its management performance.

Performance fees have been used in France for many years and have already been the subject of technical and regulatory studies by French professionals.

In addition to methodological principles, professional fund administrators find it useful to remind certain best practices that enable them to minimise residual operational risks that can potentially arise from processes involved in implementing and monitoring performance fees.

Fund administrators therefore consider it necessary to explain in detail the information contained in documents describing the method and in particular the procedures to be used for calculations, to avoid any errors in interpretation. Furthermore, many different procedures are used, which calls for special vigilance when they are implemented by the calculation systems.

Events that occur periodically, such as the closing of accounts, and events linked to the life cycle of the fund (merger/absorption) are also seen as information that need to be clarified between professionals, in order to limit potential additional operational risks that could lead to errors in the calculation of Net Asset Value.

It is vital to specify the tools that will be used to carry out calculations and to make sure they are secure, particularly when computer applications such as Excel are used that cannot always be processed via other systems such as software programs for calculating net asset values.

This part of the Guide will explain risks and constraints associated with the operational processing of performance fees and will outline practical procedures for implementation, particularly from an organisational viewpoint, to make their application simpler and more secure. Guidance is provided on a number of points with the aim of reducing operational risks at the various key stages in the process.

If the method and/or the procedures are new, either for the asset management company or for the fund administrator, or if a major event occurs during the lifetime of the fund (merger/absorption, etc.), the statutory auditor must be consulted by the asset management company before the calculation is carried out.
Implementation and documentation

Implementation of the calculation method is essentially based on regulatory documents (generally the prospectus) and interactions between the asset management company and the fund administrator to ensure that the process is correctly understood and applied.

The information contained in constitutional documents, the objective of which is to provide clear information that is comprehensible to investors, thus makes it possible to understand the calculation principles chosen by the asset management company and is generally supplemented by technical discussions, to allow the fund administrator to implement it in the calculation tools.

Prior to calculation of the first Net Asset Value that will be used as the basis for these fees, all the information required for the calculation of performance fees must be formally agreed between the asset management company and the fund administrator.

In addition, procedures for the exchange of information, particularly for the purposes of monitoring the Net Asset Value, between the asset management company and the fund administrator should be clearly defined between the parties involved before they are implemented.

This exchange of information should include:

- The full text relating to the rules for calculating performance fees, based on the most recent constitutional documents in force;
- If necessary, the transposition of this text into a list of precise information/criteria;
- Other information/criteria not included in the constitutional documents but necessary to ensure that calculations are performed correctly.

Focus on the prospectus

The prospectus is drawn up by the asset management company and is subject to authorisation (or registration) by the regulator and validation by the custodian. This document, which is aimed at investors, must contain all the information that will enable them to understand the investment vehicle being offered to them. To this end, a description of the costs that may be borne by the fund and in particular of performance fees is a key element.

Clarification of the scope of calculations

The fund can create additional categories of units during its lifetime, and each of these categories may or may not incur dedicated performance fees. Performance fees are calculated only for those categories of units for which information is provided in the “performance fee” section of the CIS’s constitutional documents.

One best practice is for the asset management company and the fund administrator to hold discussions each time a new share class is created, in order to summarise all the categories of units in the fund and specify whether or not they incur a performance fee.
Focus on additional elements

This concerns information that does not always need to be included in the constitutional documents, but which needs to be specified in order for calculations to be carried out in practice.

The main elements that require additional clarification are:

- **Codification of the reference indicator (benchmark)**
  A huge number of indices are available on the market, some of which use very similar terminology. It is therefore worth checking that the index chosen for calculations matches the index defined by the asset management company in the constitutional documents. Agreeing on the exact codification, as used by the index provider, for example, is thus a vital operational element.

- **Start date of calculations**
  The effective start date for calculating performance fees must be systematically and formally agreed with the administrator when each share class is created or reactivated.

- **Reference period**
  When a fund is created, the reference period for calculating performance fees is very often linked to the closing date. If the accounting period is less than one year, no performance fees should be levied (as a reminder, the AMF has stipulated that the frequency at which performance fees are levied must be reasonable and that a period of less than one year cannot be considered reasonable). If a new share class is created during an accounting period, the first crystallisation date cannot therefore be the same as the next closing date. Crystallisation can take place on the anniversary of the unit’s creation or afterwards. If the asset management company wants to crystallise the performance fee on the anniversary date, this will automatically create a discrepancy between the crystallisation date for different share classes and the closing date of the fund.

- **Frequency of payments**
  The crystallisation of management fees for redemptions is set out in the constitutional documents. It is also helpful to specify how frequently they will be paid to the fund administrator prior to the first crystallisation, as adjustments to the calculation tool may be necessary.

- **Procedures involved in calculation**
  Further clarification must be provided, such as the net assets that will be used as the basis for calculations.

To facilitate communication between the asset management company and the fund administrator, a sheet summarising the information needed to understand and implement the performance fees to be applied to a given fund is provided in the annex. The use of a summary sheet when a method is implemented or when any subsequent changes are made could prove very useful.
The sheet is in three parts:

- **General information**: this allows the fund concerned to be identified, as well as contact persons;
- **Accounting rules and methods**: this reiterates the text of the prospectus describing the method and procedures chosen;
- **Additional information**: a list of information required for operational processing (calculations, payments, etc.) that is not necessarily specified in the prospectus.

### Calculation system and protocols for exchanging information

The Excel spreadsheet is the tool that has historically been used to calculate performance fees. It was originally designed by asset management companies and then used by fund administrators each time net asset values were determined. Fund administrators have gradually begun to offer their own solutions, initially via Excel spreadsheets and then using dedicated applications developed internally or functional extensions to their valuation software. Protocols for exchange and calculation vary depending on the parties involved, their tools and production processes.

This computer application has the advantage that it provides immediate access to all components of a calculation, including formulas, and that it makes auditing easier. This tool is also universally used and thus easy for all parties concerned to master (asset management companies, fund administrators and auditors). It is extremely flexible and modular and combines ease of implementation with ease of presentation of data. It can be adapted to the constraints and specific features of each company’s calculations.

Being a flexible tool, Excel obviously has disadvantages as well as advantages:

- The data and formulas needed for calculations are contained directly within the Excel sheet (unlike software whose programs link to tables). That means that these data are easy to access. Protections therefore need to be put in place on certain cells in the spreadsheet, to prevent accidental modification. Only cells dedicated to variable data do not need to be protected;
- Unless you enter a cell, it is not easy to identify whether a formula has been deleted, modified or incorrectly indexed. Accidental changes to cells containing calculation formulas or non-variable data will not necessarily generate an alert to the operator. It is therefore advisable to be extremely vigilant when designing the spreadsheet, to carry out tests based on the widest possible range of scenarios and obviously to be very attentive when it is necessary to extend cells in the input fields.

In this context, the first key step in the implementation process is to ensure that the method defined by the asset management company has been correctly understood and correctly transposed to the calculation tool.
The fund administrator can design the spreadsheet as soon as he has mastered the process requested by the asset management company. Within the scope of its responsibilities, the asset management company remains in charge of final validation and ensures that the spreadsheet complies with the methods and procedures it has defined.

It is vital that the provider of the file protects all calculation cells and non-variable data, leaving only the necessary variable zones free (date, collection, indices, net assets, etc.). The provider of the file holds the password protecting all these cells and remains responsible for it, even if he decides to communicate it to a third party. The file is exchanged between the fund administrator and the asset management company each time protected data are modified or added.

When a spreadsheet has to be created with characteristics that are new to the asset management company or fund administrator, tests will be carried out based on various scenarios and validated by the asset management company, to determine which process is best suited to the needs of each party involved.

The modular nature of Excel favours multiple procedures for applying performance fees, in contrast to integrated modules such as systems for calculating Net Asset Value, which are less suited to the implementation of atypical or dedicated methods or procedures. Moreover, systems that are more automated (particularly accounting tools) are not designed to return calculation formulas or interim results in audit reports or to comply with audit protocols of asset management companies and auditors; some fund administrators provide proof via an Excel spreadsheet even if the calculations have been carried out using their accounting software.

It is nevertheless desirable to move towards more integrated processes, with these tools now becoming sufficiently developed to cover the majority of calculation methods and procedures currently used. They are developed by specialist teams in accordance with standardised principles and meet security criteria for both parametrisation and data entry. These tools have the advantage that the calculation is integrated directly into the net asset value processing chain, which eliminates the manual part of the process and the resulting rupture in the calculation chain. Finally, when the calculation is carried out on an external tool, the results of calculations can easily be interfaced in the accounting tool without any manual intervention. To the extent that the tool includes its own functions for protecting data, formulas, etc., files that are exchanged do not necessarily have to be protected using the same procedures as for an Excel spreadsheet.

The fund administrator’s services must include the provision to the asset management company of results of calculations, as well as the items included in these calculations and the figures involved; the format in which these data are expected to be returned must be specified in advance in the service contract.
Events occurring during the lifetime of the fund

Apart from implementation of the process for calculating performance fees and the process for determining Net Asset Value, certain events will require special attention or even specific treatment.

These include periodic events that are foreseeable as they are mentioned in the fund documentation: resetting of the reference period, payment of accrued costs or of performance fees, payment of distributable sums and possibly payments on account. Payment of accrued performance fees has no impact on calculations. The resetting of the reference period (i.e. data are reset for a new reference period) and payment of distributable sums (or payments on account) have a significant impact.

When managing distributable sums or payments on account, the level of fund assets (and Net Asset Value) is affected in line with the amount distributed. The calculation system must therefore take account of these events and assets must be “adjusted” after payment in order to reflect this event. If the reference period is reset or in the event of a distribution, the auditor may in rare cases be consulted about performance tables. If there is a change of methodology, formal validation from the asset management company may be necessary.

Other events that cannot be foreseen when the fund is created may also affect the calculation of performance fees, such as mergers/absorptions, demergers, splits or reverse splits of units or liquidations. Information must be exchanged between the asset management company, auditor and fund administrator and formal validation from the asset management company may be required.

a) Merger/absorption

A merger/absorption usually occurs between funds of the same type and with the same management orientation and similar accounting characteristics. This does not guarantee that they will have the same performance and/or the same procedures for calculating performance fees.

In the fund that has been absorbed, calculations of performance fees are “frozen” on the date the merger/absorption took place. If the absorbed fund has generated an excess performance, the provision recognised should be regarded as “accrued costs”.

In the absorbing fund, the usual procedure is an asset transfer and subscription to units: in this case, calculations are not frozen. The table shows a subscription that will result in the weighting of assets.
b) Demergers, splits or reverse splits of units

In the case of a demerger or split (involving, respectively, the separation of a fund into two or more distinct funds and a change in the fund’s nominal value), no impact is anticipated on performance fees because:

- in the case of a demerger or split, all of the assets and liabilities are distributed on a pro rata basis (no impact on performance or on the components of the Net Asset Value). The old table will be frozen and two or more new tables will be created for each share class resulting from the demerger;
- in the case of a reverse split of units, only the number of units and the NAV are modified. This needs to be taken into account in the table. As the modifications offset each other, there is no impact on performance, provisions, etc.

c) Liquidation

In the case of a liquidation, it is advisable to treat this event as a mass redemption of units. That means regarding performance fees for which provisions may have been recognised as “accrued costs”.

Other “exceptional” events may occur during the lifetime of the fund, such as a change of asset management company or manager, a change of fund administrator or a new direction decided on by the asset management company. All the information required for calculation of performance fees must be formally agreed between the asset management company and the fund administrator. These events must not have any impact on calculations, but may require adjustments to procedures for exchanging information. In the event of a change of fund administrator, a transition phase will be necessary. If there is a change of accounting service provider and if the previous provider supplied the spreadsheet (or carried this out via its internal system), the asset management company must provide formal validation of the new model to the new service provider. If a file is transferred between the old and the new service provider, the asset management company must also provide formal validation.

If there is a change in management orientation or a change of index, unless there are exceptional circumstances, it is advisable to continue calculations by linking the indices. There will therefore be two calculations during the fund’s accounting period and there is no need to begin a new period of one year before fees can be paid to the asset management company.
Application procedures – basis for calculations

Taking into account fixed management fees

Fixed management fees are calculated before performance fees are charged. The methods used must make it possible to ensure that the maximum rate for management fees stated in the prospectus (expressed on the basis of net assets after provisioning) is not exceeded.

The various steps in the calculation are as follows:

- Step 1: simulation of calculation of provisional net assets (=gross assets for provisions);
- Step 2: calculation of fixed fees based on provisional net assets (=gross assets for provisions);
- Step 3: booking of these provisional data in the Excel spreadsheet (or equivalent tool);
- Step 4: accounting for provisions for performance fees, if applicable;
- Step 5: charging of provisions to determine definitive net assets.

During step 5, if the accounting tool has not frozen the calculations of fixed management fees (step 2), it will have to recalculate them. In that case, the tool will have to be capable of recalculating provisional net assets (from step 1), ignoring the performance fees accounted for in step 4, in order to find the same basis for calculation of fixed costs.

Fixed management fees are calculated without taking into account the calculation of performance fees. If the accounting software does not allow this treatment, the Excel spreadsheet will take it into account in order to correct its effects. However, we would like to reiterate that fund management companies must ensure that they observe the maximum rate of fees that can be applied based on the fund’s net assets (i.e. net assets after provisioning).

Assets used as the basis for calculation

The assets that must be taken into account in the calculation of performance fees are the provisional assets on the calculation date (gross assets). Performance must be calculated based on gross assets. Gross assets correspond to current assets to which fixed management fees have been charged, before any provisions for performance fees that have not been crystallised.

Management of foreign currencies

When it comes to accounting for units held in a different currency from that of the fund, the exchange rate used for conversion calculations carried out by the performance calculation system is the same as that used to calculate net asset value, in order to avoid friction linked to conversions during intermediate calculations.
Performance Fees
AFTI Summary Sheet
ACCOUNTING RULES AND METHODS (extract from the prospectus)

Rules on performance fees

Example:
20% of performance, calculated by comparing changes in the fund’s assets with changes in the assets of a reference fund whose performance is exactly the same as its reference indicator, i.e. the index made up of 50% of the DJ EURO STOXX 50...

Description of calculation method and procedures

Example:
The performance fee is based on a comparison of the performance of the mutual fund and a benchmark index defined below for the reference period. The benchmark index is equal to the reference indicator for the fund (50% DJ EURO STOXX 50 index [dividends reinvested] and 50% Eonia index). The performance fee is calculated over a reference period of 12 months from December to December. The first reference period will run from the launch date of the fund to the first closing date of the fund (end of December 2010).
The performance fee relating to unit S will be deducted for the first time in December 2016. Performance is calculated by comparing changes in the fund’s assets with changes in the assets of a reference fund whose performance is exactly the same as the fund’s reference indicator and that has experienced the same changes in subscriptions and redemptions as the actual fund.
- If, during the reference period, the performance of the mutual fund exceeds that of the reference fund, the variable portion of management fees will represent 20% of the difference between the performance of the mutual fund and the performance of the reference fund, provided that the performance of net asset value has been positive since the start of the reference period.
- If the variable portion leads to a negative performance for the fund for the reference period, the variable portion will be reduced so that net asset value is equal to the reference net asset value (net asset value at the end of the previous accounting period).
- If, during the reference period, the performance of the mutual fund is inferior to that of the reference fund, the variable portion of management fees will be zero.
- If, during the reference period, the performance of the mutual fund since the start of the reference period exceeds that of the reference fund calculated for the same period and if the performance of the fund since the start of the reference period is positive, this excess performance will be subject to a provision for variable management fees when net asset value is calculated.

If the mutual fund underperforms in relation to the reference fund between two calculations of net asset value, any provisions made previously will be adjusted through reversal of provisions. Reversals of provisions are capped at the level of previous allocations.
This variable portion will be definitively collected at the end of the reference period only if, for the reference period just ended, the performance of the mutual fund exceeds that of the reference fund and if the performance of the mutual fund is positive for the reference period. In the event of the redemption of units, if provisions have been made for performance fees, the share that is proportionate to the redeemed units is calculated and accrues to the asset management company. These fees will be charged directly to the fund’s profits.
## Summary

### Reference Indicator

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### General Calculation Procedures

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<table>
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<th>Additional notes:</th>
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<tbody>
<tr>
<td>Calculation method: Indexed assets □ Other □</td>
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<td>If &quot;Other&quot;, please specify:</td>
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#### Application procedures

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<th>Catch-up mechanism</th>
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<tr>
<td>Specify the mechanism: Target value □ Nominal NAV □</td>
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<tr>
<td>Closing NAV □</td>
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<tr>
<td>Highest closing NAV subject to provisions □</td>
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</tr>
<tr>
<td>Highest closing NAV across several acc. periods □</td>
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<tr>
<td>No. of acc. periods:</td>
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<tr>
<td>Highest NAV for acc. period □</td>
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<th>Other procedures:</th>
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<tr>
<td>Fixed fees Recalculated □ Not recalculated □</td>
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<tr>
<td>Assets on date Yes □ No □</td>
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<tr>
<td>Assets prev. day Yes □ No □</td>
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<td>Other Yes □ No □</td>
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### Special Calculation Procedures

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<th>List of share classes</th>
<th>Calculation?</th>
<th>Currency of units</th>
<th>Perf. target (%)</th>
<th>Start date 1st calculations</th>
<th>Crystallisation date</th>
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<td>2/</td>
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<td>3/</td>
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<td>4/</td>
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<td>5/</td>
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<td>6/</td>
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<td>8/</td>
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</table>

## Annex

AFG-AFTI guide to performance fees for UCITS and retail investment funds

November 2018
AFG would like to thank all the members of the working group who participated to the drafting of this Code, and in particular its co-Chairmen, Sylvain FRANCOIS, Mandarine Gestion, and Philippe PAUCHONT, Carmignac Gestion, who led this transversal working group attached to the AFG Risk Management Commission, chaired by Arnaud FALLER, CPR Asset Management and Olivier CORBY, Candriam (vice-Chairman). AFG would also like to thank all the members of the AFTI working group chaired by Thierry HAENER, RBC Investor & Treasury Services.

Adina GURAU AUDIBERT, Head of Asset Management, AFG, coordinated the working group.

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