Compliance report
September 2021

Recommendations C and E of the Recommendation of the European Systemic Risk Board of 7 December 2017 on liquidity and leverage risks in investment funds (ESRB/2017/6)
# Contents

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Introduction</td>
<td>2</td>
</tr>
<tr>
<td>1 Policy objectives</td>
<td>4</td>
</tr>
<tr>
<td>2 Methodology</td>
<td>8</td>
</tr>
<tr>
<td>2.1 Grading methodology</td>
<td>8</td>
</tr>
<tr>
<td>2.2 Principle of fairness, consistency and transparency</td>
<td>10</td>
</tr>
<tr>
<td>2.3 Principle of proportionality</td>
<td>11</td>
</tr>
<tr>
<td>2.4 Regulatory arbitrage</td>
<td>12</td>
</tr>
<tr>
<td>3 ESMA assessment report</td>
<td>13</td>
</tr>
<tr>
<td>3.1 Recommendation C: guidance on liquidity stress testing</td>
<td>13</td>
</tr>
<tr>
<td>3.2 Recommendation E: guidance on Article 25 of Directive 2011/61/EU</td>
<td>15</td>
</tr>
<tr>
<td>Conclusions</td>
<td>23</td>
</tr>
<tr>
<td>Annex I: Composition of the Assessment Team</td>
<td>25</td>
</tr>
<tr>
<td>Annex II: Implementation standards for Recommendation ESRB/2017/6</td>
<td>26</td>
</tr>
<tr>
<td>Abbreviations</td>
<td>32</td>
</tr>
<tr>
<td>Imprint and acknowledgements</td>
<td>33</td>
</tr>
</tbody>
</table>
Introduction

This compliance report provides an assessment of the implementation of Recommendations C and E of the Recommendation of the European Systemic Risk Board of 7 December 2017 on liquidity and leverage risks in investment funds (ESRB/2017/6) (hereinafter the “Recommendation”) as at June 2021.

The Recommendation is partially addressed to the European Securities and Markets Authority (ESMA) and aims to address systemic risks related to liquidity mismatches and the use of leverage in investment funds.

In accordance with Article 17 of the ESRB Regulation1 and Section 2(3) of the Recommendation, ESMA was requested to deliver to the ESRB, the Commission, the Parliament and the Council a report on the implementation of Recommendation C and Recommendations E(1), E(2) and E(3) by 30 June 2019. Under Recommendation E(4), ESMA was requested to provide at least annually the information received by the national competent authorities (NCAs), starting on 31 December 2019. The report was submitted to the ESRB Secretariat on the due date.

The assessment of the report was carried out by an Assessment Team consisting of eight assessors, including one Chair, endorsed by the Advisory Technical Committee (ATC) of the ESRB (see Annex I of this compliance report), which followed the methodology provided in the “Handbook on the assessment of compliance with ESRB recommendations” of April 2016 (hereinafter the “Handbook”)2.

Overall, the Assessment Team observed a high level of compliance with the Recommendation while carrying out its assessment, since ESMA provided detailed and comprehensive guidelines on liquidity stress testing in undertakings for collective investment in transferable securities (UCITS) and alternative investment funds (AIFs)3, on Article 25 of Directive 2011/61/EU4 and on the procedure for imposing leverage limits under Article 25 of Directive 2011/61/EU5.

This compliance report is structured as follows. Part I recalls the policy objectives of the Recommendation. Part II summarises the methodology set out in the Handbook, which establishes the procedure for assessing compliance with ESRB recommendations, and presents the implementation standards drafted by the Assessment Team and used to assess compliance by the addressees with the respective recommendations. Part III consists of the assessment of ESMA’s compliance with the Recommendation.

---

Annex I lists the members of the Assessment Team and Annex II contains the implementation standards. A list of abbreviations is provided at the end of the report.
1 Policy objectives

The Recommendation aims to address systemic risks related to liquidity mismatches and the use of leverage in investment funds. The investment fund sector has grown strongly over the past decade, both in the European Union and globally, and consequently investment funds now account for a greater overall component of securities markets. The role of investment funds in financial intermediation is expected to increase further in an environment of low interest rates and balance sheet constraints in the banking sector, coupled with changes resulting from the development of the capital markets union.

However, there are concerns that increased financial intermediation by investment funds may result in the amplification of any future financial crisis. Mismatches between the liquidity of open-ended investment funds’ assets and their redemption profiles may result in fire sales in order to meet redemption requests in times of market stress.

Recommendation C is designed to promote coherent liquidity stress testing practices at the investment fund level. Stress tests are tools that help the fund manager identify potential weaknesses of an investment strategy and assist in preparing an investment fund for a crisis. If used correctly, as a risk management and decision-making tool, a stress test should reduce liquidity risk at the investment fund level and contribute to lowering liquidity risk at the financial system level. Guidance on fund managers’ liquidity testing practices is expected to (i) reduce liquidity risk, at both investment fund and system levels, and (ii) strengthen the ability of entities to manage liquidity in the best interests of investors, including the avoidance of surprises and resulting emergency reactions during periods with unexpectedly high redemption pressure.

Recommendation E is designed to facilitate the implementation of Article 25 of Directive 2011/61/EU, which provides for a macroprudential tool that gives NCAs the power to impose limits on the level of leverage that an alternative investment fund manager (AIFM) is entitled to employ when this contributes to the build-up of systemic risk in the financial system. There is a need to clarify the use of this tool by developing a common approach to ensure that NCAs are able to use the tool in a harmonised manner. Therefore, guidance on a framework to assess leverage risks and on the design, calibration and implementation of leverage limits should be developed.

1.1.1 Content and structure

The Recommendation is structured into five recommendations (A, B, C, D and E), with only Recommendations C and E being covered by this report.

Recommendation C – Stress testing

In order to promote supervisory convergence, ESMA is recommended to develop guidance on the practice to be followed by managers for the stress testing of liquidity risk for individual AIFs and UCITS.

ESMA is recommended to give guidance on the framework to assess the extent to which the use of leverage within the AIF sector contributes to the build-up of systemic risk in the financial system.

ESMA is recommended to give guidance on the design, calibration and implementation of macroprudential leverage limits.

ESMA is recommended to give guidance on how NCAs should notify ESMA, the ESRB and other NCAs of their intention to implement macroprudential measures under Article 25(3) of Directive 2011/61/EU.

ESMA is recommended to use the information received from NCAs pursuant to Article 25(3) of Directive 2011/61/EU to benchmark and share knowledge with national macroprudential authorities and the ESRB, at least annually, on practices in relation to the use of leverage limits and the imposition of other restrictions on the management of AIFs.

### 1.1.2 Implementation

The Recommendation is intended to cover AIFs, AIFMs, UCITS and UCITS management companies. It also aims to avoid regulatory arbitrage and to take into consideration the principle of proportionality with regard to the objective and the content of each recommendation.

Annex I of the Recommendation further specifies the criteria that ESMA is expected to comply with. These include:

- **For Recommendation C**, the following compliance criteria:
  
  The guidance issued on liquidity stress testing by ESMA should include, but not be limited to:

  (a) the design of liquidity stress testing scenarios;

  (b) the liquidity stress test policy, including internal use of liquidity stress test results;

  (c) considerations for the asset and liability sides of investment fund balance sheets; and

  (d) the timing and frequency for individual funds to conduct the liquidity stress tests.

  Such guidance should be based on the stress testing requirements set out in Directive 2011/61/EU and how market participants carry out stress testing.

- **For Recommendation E**, the following compliance criteria:

  E(1) – Assessment of leverage-related systemic risk

  The guidance issued by ESMA should include:

  (a) a common minimum set of indicators to be taken into account by the NCAs during their assessment;
Recommendations C and E of the Recommendation of the European Systemic Risk Board of 7 December 2017 on liquidity and leverage risks in investment funds (ESRB/2017/6) September 2021

Policy objectives

(b) instructions to calculate the indicators referred to in point E(1)(a) based on reporting data under Article 24 of Directive 2011/61/EU; and

(c) qualitative and, where feasible, quantitative descriptions of the interpretation of the indicators in the context of the assessment framework.

The common set of indicators referred to in point E(1)(a) should:

1. facilitate assessment of the level, source and different usages of leverage;
2. facilitate assessment of the main channels through which systemic risk may materialise, i.e. fire sales, direct spillovers to financial institutions, and the interruption of credit intermediation; and
3. be operable and sufficient for NCAs to inform ESMA, in connection with its advice under Article 25(6) of Directive 2011/61/EU and the principles laid down in Article 112 of Commission Delegated Regulation (EU) No 231/2013, whether the conditions for imposing leverage limits or other restrictions on the management of AIFs have been met.

E(2) – Macroprudential leverage limits

The guidance issued by ESMA should include:

(a) a description of the various types of leverage limits, including an evaluation of their effectiveness and efficiency in mitigating excessive leverage;

(b) a set of principles to be taken into account by the NCAs when calibrating leverage limits. As a minimum such principles should include all of the following: (i) a statement that provides for leverage limits to be based on the leverage measures set out in Directive 2011/61/EU; (ii) criteria for applying leverage limits; and (iii) principles regarding the periodic review of leverage limits;

(c) a set of principles to be taken into account by the NCAs when considering the imposition of leverage limits, as a minimum covering all of the following: (i) principles for a balanced approach between rules-based versus discretionary limit setting; (ii) principles relating to the interaction with other policy measures; and (iii) principles for coordination among Union authorities.

E(3) – Notification procedure

The guidance issued by ESMA should enable the NCAs to notify ESMA, the ESRB and other relevant NCAs. In particular, this guidance should include, but not be limited to, an efficient working procedure and templates for notification letters and reporting requirements as regards the NCAs’ assessment of the need to implement macroprudential measures pursuant to Article 25(3) of Directive 2011/61/EU.

E(4) – Benchmarking
ESMA should share, on an annual basis, with national macroprudential authorities and the ESRB:

(a) the results, if any, of its benchmarking exercise;

(b) the practices, if any, in relation to the use of leverage limits and the imposition of other restrictions on the management of AIFs using information received from the NCAs pursuant to Article 25(3) of Directive 2011/61/EU.
2  Methodology

Article 17 of the ESRB Regulation entrusts the ESRB with monitoring the compliance of addressees with ESRB recommendations. To this effect, and pursuant to Article 20 of the ESRB Rules of Procedure, the ESRB assesses the actions and justifications undertaken and communicated by the addressees of ESRB recommendations in accordance with the “act or explain” mechanism described in Article 17 of the ESRB Regulation, whereby the addressee of a recommendation can either (i) take action in response to a recommendation, or (ii) adequately justify any inaction. The ESRB thus analyses the information provided by addressees and assesses whether the action taken duly achieves the objective of the recommendation, or whether the justification provided for inaction is sufficient. This analysis results in a final compliance grade being assigned to each addressee, reflecting the level of implementation by the relevant addressee.

2.1 Grading methodology

In order to arrive at a single grade for each recommendation, a four-step grading methodology was employed in line with the ESRB Handbook. Such a methodology is necessary to ensure full transparency of the single overall compliance grade and a high level of objectivity in the entire assessment process, while still allowing room for high-quality expert judgement, which can easily be identified and reviewed to understand the rationale behind the allocation of particular overall grades.

Step I – When assessing compliance with the Recommendation, the implementation of each recommendation was, in accordance with the established implementation standards, graded as either FC/LC/PC/MN/NC in the case of action, SE/IE in the case of inaction or N/A if the recommendation was not applicable.

The grading scale for action is as follows:

Fully compliant (FC): an addressee complies entirely with the requirements;

Largely compliant (LC): the requirements have been met almost entirely and only negligible requirements remain to be implemented;

Partially compliant (PC): the most important requirements have been met; certain deficiencies affect the adequacy of the implementation, without resulting in a situation where the given recommendation has not been acted upon;

Materially non-compliant (MN): the requirements have only been fulfilled to a degree, resulting in a significant deficiency in the implementation;

---

Non-compliant (NC): almost none of the requirements have been met, even if steps have been taken towards implementation.

The grading scale for inaction is as follows:

Sufficiently explained (SE): a complete and well-reasoned explanation for the lack of implementation has been provided. If one or more of the recommendations are intended to address a particular systemic risk that does not affect a particular addressee, such justification/explanation may be considered sufficient;

Insufficiently explained (IE): the explanation given for the lack of implementation is not sufficient to justify the inaction.

Step II – Compliance grades for each recommendation were converted into a numerical grade (see Table 1). These numerical grades were then weighted and aggregated into a single numerical grade for each recommendation.

<table>
<thead>
<tr>
<th>Compliance grade</th>
<th>Numerical grade</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fully compliant (FC)</td>
<td>1</td>
</tr>
<tr>
<td>Largely compliant (LC)</td>
<td>0.75</td>
</tr>
<tr>
<td>Partially compliant (PC)</td>
<td>0.50</td>
</tr>
<tr>
<td>Materially non-compliant (MC)</td>
<td>0.25</td>
</tr>
<tr>
<td>Non-compliant (NC)</td>
<td>0</td>
</tr>
<tr>
<td>Sufficiently explained (SE)</td>
<td>1</td>
</tr>
<tr>
<td>Insufficiently explained (IE)</td>
<td>0</td>
</tr>
</tbody>
</table>

Step III – The numerical grades for each recommendation were then weighted and aggregated into a single numerical grade for the entire Recommendation.

Step IV – Finally, the overall compliance grade was determined by converting the single numerical grade for the entire Recommendation into a final grade for compliance using the conversion table below.
Recommendations C and E of the Recommendation of the European Systemic Risk Board of 7 December 2017
on liquidity and leverage risks in investment funds (ESRB/2017/6) September 2021
Methodology

Table 2
Conversion table: compliance grades to numerical grades

<table>
<thead>
<tr>
<th>Compliance grades</th>
<th>Numerical grades</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fully compliant (FC)</td>
<td>0.9-1</td>
</tr>
<tr>
<td>Largely compliant (LC)</td>
<td>0.65-&lt;0.9</td>
</tr>
<tr>
<td>Partially compliant (PC)</td>
<td>0.4-&lt;0.65</td>
</tr>
<tr>
<td>Materially non-compliant (MC)</td>
<td>0.15-&lt;0.4</td>
</tr>
<tr>
<td>Non-compliant (NC)</td>
<td>0-&lt;0.15</td>
</tr>
</tbody>
</table>

The level of compliance was then expressed in colour-coded form:

Table 3
Colour codes for levels of compliance

<table>
<thead>
<tr>
<th>FC – Actions taken fully implement the Recommendation</th>
<th>MN – Actions taken only implement a small part of the Recommendation</th>
</tr>
</thead>
<tbody>
<tr>
<td>LC – Actions taken implement almost all of the Recommendation</td>
<td>PC – Actions taken only implement part of the Recommendation</td>
</tr>
<tr>
<td>SE – No actions were taken but the addressee provided sufficient justification</td>
<td>NC – Actions taken are not in line with the nature of the Recommendation</td>
</tr>
<tr>
<td></td>
<td>IE – No actions were taken and the addressee did not provide sufficient justification</td>
</tr>
</tbody>
</table>

2.2 Principle of fairness, consistency and transparency

While conducting the assessment, the Assessment Team analysed the content/substance of the actions taken by ESMA to assess the extent of its compliance with all of the elements of the Recommendation.

To ensure a consistent and fair analysis, the Assessment Team created implementation standards against which the responses submitted by ESMA were assessed (see Annex II).

The establishment of these implementation standards was based on the requirements of the ESMA guidelines on liquidity stress testing for Recommendation C and the following four key elements regarding the imposition of leverage limits for Recommendation E:

Recommendation E(1) – ESMA’s guidance on the framework to assess leverage-related systemic risk

Recommendation E(2) – ESMA’s guidance on the design, calibration and implementation of macroprudential leverage limits

Recommendation E(3) – ESMA’s guidelines on notification procedures
Recommendation E(4) – sharing of ESMA benchmarking, on an annual basis, with national macroprudential authorities and the ESRB

In this respect, the Assessment Team examined the guidelines submitted by ESMA and the degree of compliance in relation to the intended guidance that should be provided on Recommendation C and Recommendations E(1), E(2), E(3) and E(4). The guidance, procedures and the recommendation letter were sent to the ESRB on 16 December 2020, except for the guidelines on liquidity stress testing in UCITS and AIFs, which were submitted on 16 July 2020, after the expiration of the deadline indicated in the Recommendation. The Assessment Team decided not to take into account the delay with which ESMA complied with the Recommendation in its grading.

When conducting the assessment, the Assessment Team also agreed not to take into account external sources in the grading of ESMA. Although only the information provided to the ESRB constituted the basis for the assessment, in cases where certain elements reported by ESMA required further clarification, this requirement was addressed to ESMA through correspondence.

With respect to Recommendation E(4) in particular, ESMA had already provided justification in its letter dated 16 December 2020 that it would share knowledge on the activation of leverage limits under Article 25(3) of the AIFMD with macroprudential authorities and the ESRB once it had received notification from NCAs and gained sufficient experience in this field.

However, the Assessment Team decided that a formal request should be sent to ESMA for more up-to-date information, through a written communication to ESMA. In its response letter dated 3 May 2021, ESMA confirmed that it had not received any notification from NCAs on the activation of leverage limits under Article 25(3) of the AIFMD, because this tool had never been used by NCAs, and for that reason it had not notified macroprudential authorities or the ESRB. ESMA furthermore informed the Assessment Team of its follow-up work with NCAs on the implementation of ESMA’s guidelines on leverage. The aim of this work is to share experience and achieve a consistent approach at a technical level. For this purpose, ESMA is preparing a template for NCAs to report the results of their risk assessment at least on an annual basis and whenever NCAs identify a risk relevant for financial stability. Based on this additional information, the Assessment Team confirmed that there was sufficient explanation and justification of why ESMA had not shared information on the use of leverage limits by NCAs.

2.3 Principle of proportionality

In line with EU law and in accordance with Section 2, point 2(1)(c) of the Recommendation, due regard should be paid to the principle of proportionality, taking into account the objective and the content of the Recommendation. The prominent relevance of the principle of proportionality required the Assessment Team to examine to what extent ESMA’s guidelines consider the efficient utilisation of leverage limits by competent authorities that are monitoring funds which are either (i) systemically important in terms of the size of their assets, or (ii) maintain a risk profile and engage in activities that are considered significant in terms of their contribution to overall systemic risk.
The Assessment Team decided not to assess proportionality as a stand-alone grade in the implementation standards, but in conjunction with the assessment of each recommendation, on the grounds that ESMA had clearly and explicitly taken into account the principle of proportionality in complying with ESRB Recommendations C and E.

In its guidance, ESMA explicitly refers to the principle of proportionality on three occasions. First, the guidelines on Article 25 of Directive 2011/61/EU stress the need for competent authorities to evaluate the efficiency of leverage limits in mitigating excessive leverage by taking into consideration the proportionality of the leverage limits to the systemic risk posed by the use of leverage by the AIFM. These guidelines also state that “the option of calibrating the limits based on the fund profile and the efficiency of the limits in reducing the risk, should be more proportionate, limit the build-up of systemic risk and improve financial stability”.

In addition, the guidelines on liquidity stress testing in UCITS and AIFs clearly stipulate that the decision on the granularity, depth of analysis and use of data is subject to necessity and proportionality. In this vein, managers should understand the potential risks associated with the fund’s investor base and be able to demonstrate that those risks are taken into consideration in the ongoing liquidity risk management of a fund as appropriate.

2.4 Regulatory arbitrage

In accordance with Section 2, point 2(1)(b) of the Recommendation, regulatory arbitrage should be avoided, taking into account the objective and the content of the Recommendation. In view of this requirement, the Assessment Team examined whether the guidance provided by ESMA to the competent authorities acknowledged regulatory arbitrage as being one of the unintended consequences of certain practices and whether it made proposals that could contribute to the reduction of such arbitrage activities.

More specifically, the Assessment Team observed to what extent the ESMA guidelines reduce regulatory arbitrage, while ensuring that competent authorities consider a consistent level playing field for different types of AIFs with similar risk profiles. In addition, the Assessment Team observed whether ESMA’s guidance is expected to ensure a greater convergence of supervision, regardless of the legal form of the entity.

The Assessment Team decided not to include regulatory arbitrage as a stand-alone grade in the implementation standards, but rather considered whether it had been taken into account either explicitly or implicitly when providing an assessment for each one of the recommendations.

Though no explicit reference was made by ESMA in the responses provided, the need to avoid regulatory arbitrage is implicitly acknowledged in ESMA’s guidelines on Article 25 of Directive 2011/61/EU, which state how authorities should consider the interaction of AIFMs as well as the coordination role that ESMA assumes. The same guidelines also outline the need for common practices in order to avoid cases where some Member States could adopt different rules, thus creating greater uncertainty in the effective use of the extensive information available to NCAs under Directive 2011/61/EU.
3 ESMA assessment report

3.1 Recommendation C: guidance on liquidity stress testing

ESMA was recommended by the ESRB to deliver the guidance on liquidity stress testing in investment funds by 30 June 2019. ESMA published a consultation paper on the draft guidelines on 5 February 2019. The consultation closed on 1 April 2019. The final report containing the final set of guidelines was published on 2 September 2019. The guidelines were published on 16 July 2020 and applied from 30 September 2020.

In its guidelines on liquidity stress testing in UCITS and AIFs, ESMA provides detailed and comprehensive instructions on the practice to be followed by managers for the stress testing of liquidity risk for individual AIFs and UCITS. ESMA opts for a principles-based approach due to the heterogeneity of fund structures, allowing managers more flexibility. ESMA clarifies that the guidelines apply to exchange-traded funds that are UCITS or AIFs, leveraged closed-ended AIFs and money market funds, without prejudice to the specific provisions.

These guidelines comply with the following criteria outlined in the Recommendation:

The design of liquidity stress testing scenarios: (FC)

ESMA advises the use of different types of stress testing (hypothetical and historical scenarios and, where appropriate, reverse stress testing) and gives guidance on how these scenarios should be designed (V.1.8 LST scenarios). Furthermore, ESMA provides advice on how to deal with limitations in data availability (V.1.9 Data availability).

The liquidity stress testing policy, including internal use of liquidity stress test results: (FC)

ESMA elaborates on the liquidity stress testing policy that should be adopted within the UCITS and AIF risk management process. ESMA lists a minimum set of aspects that should be addressed by the policy and advises the appropriate documentation of the policy, which should be periodically reviewed and adapted where necessary (V.1.4 The LST policy).

ESMA also points out that liquidity stress testing should be embedded into the fund’s risk management framework supporting liquidity management and should take into account the separation of functions and conflicts of interest (V.1.3 Governance principles for LST).

In addition, ESMA gives guidance on the use of liquidity stress testing outcomes (V.1.6 The use of LST outcomes).

---

7 “Consultation on draft guidelines on liquidity stress test for investment funds”, ESMA, 5 February 2019 to 1 April 2019.
Considerations for the asset and liability sides of investment fund balance sheets: (FC)

In its guidelines, ESMA makes reference to the stress testing of both funds’ assets and liabilities in order to determine the effect on the investment fund’s liquidity.

ESMA advises that liquidity stress testing should enable a manager to assess the time and cost necessary to liquidate assets as well as whether or not such an activity would be permissible for the fund (e.g. according to the fund’s investment policy) (V.1.11 Stress testing fund assets to determine the effect on fund liquidity).

In terms of the liability side, ESMA advises that not only redemptions but also other potential sources of liquidity risk emanating from the liability side of the fund’s balance sheet should be subject to liquidity stress testing. In this respect, ESMA also gives examples of factors related to investors’ behaviour and redemption requests (V.1.12 Stress testing fund liabilities to determine the effect on fund liquidity). Moreover, ESMA provides examples of factors related to different types of liabilities that may also affect liquidity risk, such as derivatives, securities financing transactions or credit payments (V.1.13 LST on other types of liabilities).

The timing and frequency for individual funds to conduct the liquidity stress tests: (FC)

ESMA elaborates on the frequency of liquidity stress testing. In this context, it advises that liquidity stress testing should be carried out at least annually and, where appropriate, employed at all stages of a fund’s lifecycle. As a rule, ESMA recommends employing quarterly or more frequent liquidity stress testing, depending on the fund’s characteristics (V.1.5 Frequency of LST).

Compliance with the stress testing requirements set out in Directive 2011/61/EU and how market participants carry out stress testing: (FC)

In its guidelines, ESMA also refers to the requirements for liquidity stress testing as set out in Directive 2011/61/EU. It also conducted a consultation in which it took into account comments by market participants on how they carry out stress testing.

Additional criteria that are considered in the guidelines: (FC)

ESMA recommends a proportionate application of the guidelines that should be adapted to the nature, scale and complexity of the funds (Scope, paragraph 7). In addition to the aspects mentioned above, ESMA makes some general remarks on the concept of liquidity stress testing. ESMA gives an overview of what to consider in general when designing liquidity stress testing models and underlines their importance to understanding liquidity risks (V.1.1 The design of the LST models and V.1.2 Understanding liquidity risks).

ESMA advises that liquidity stress testing should also be considered during product development (V.1.10 Product development).

ESMA elaborates on how funds investing in less liquid assets are exposed to distinct risks emanating from both assets and liabilities compared with funds investing in more liquid assets. In particular, paragraph 63 highlights the importance of liquidity stress testing (LST) in cases of low probability/high impact scenarios, where price uncertainty can affect the liquidity profile of the funds. Paragraph 66 highlights the need for funds to also incorporate liquidity risks related to funds’
ESMA advises that managers should combine the results of the liquidity stress testing appropriately to determine the overall effect on fund liquidity, after separately stress testing the assets and liabilities of the fund balance sheet (V.1.15 Combined asset and liability LST).

Furthermore, ESMA advises that managers should perform liquidity stress testing not only for each fund, but also aggregate it across the funds they manage (V.1.7 Adapting the LST to each fund and V.1.16 Aggregating LST across funds).

Finally, ESMA gives some guidance not only to managers, but also to depositaries and on interaction with national competent authorities (V.2 Guidelines applicable to depositaries and V.3 Interaction with NCAs).

### 3.2 Recommendation E: guidance on Article 25 of Directive 2011/61/EU

ESMA was recommended by the ESRB to deliver guidance to facilitate the implementation of Article 25 of Directive 2011/61/EU, which provides for a macroprudential tool to limit leverage in AIFs. In particular, ESMA was recommended to develop a common approach/framework to assess leverage risks and on the design, calibration and implementation of leverage limits in order to ensure that NCAs are able to use the tool in a harmonised manner. ESMA delivered the final report on guidelines on Article 25 of Directive 2011/61/EU in December 2020.

These guidelines comply with the recommendations as follows:

#### 3.2.1 Recommendation E(1): assessment of leverage-related systemic risk

In accordance with the specific compliance criteria for the assessment of leverage-related systemic risk set out in the Recommendation, the guidance issued by ESMA should include:

**The definition of a common minimum set of indicators to be taken into account by the NCAs during their assessment: (FC)**

The ESMA guidelines provide a framework that ensures a consistent approach among NCAs in assessing systemic risk arising from leverage, and a set of indicators is provided in the ESMA final report for this purpose (pages 24-25, Tables 1 and 2). The framework is based on a two-step approach that is very much aligned with the IOSCO leverage framework. In Step 1, NCAs identify those funds that may pose financial stability risks by looking at the level, source and different usages of leverage, captured by the size of the funds in terms of assets under management or in terms of substantial use of leverage. This is calculated on the basis of the AIFMD commitment.

---

10 Economic rationale for ESRB Recommendation E(1), pages 40-42: The international nature of the AIF sector calls for a more coordinated approach to the assessment of leverage-related systemic risk and potential mitigating measures.
method or the leverage indicators provided by ESMA in Table 1 of its guidelines (gross leverage, commitment leverage, adjusted leverage, financial leverage).

In Step 2, competent authorities should evaluate potential leverage-related systemic risks to financial stability of the funds identified under Step 1 and include in their assessment at least the risks included in Step 2. Indicators to be used for Step 2 are provided by ESMA in Table 2 of its guidelines and cover the following risks: risk of market impact, risk of fire sales, risk of direct spillover to financial institutions and risk of interruption in direct credit intermediation.

These indicators, read in combination with the leverage measures, should help NCAs assess whether the leveraged AIF would potentially entail systemic risk to the financial sector. They aim at identifying the various channels of risk propagation through which systemic risk may materialise, in line with the ESRB Recommendation. Competent authorities should use their risk assessment, in combination with a qualitative assessment where necessary, to select the AIFs for which it is appropriate to set a leverage limit.

**Instructions to calculate the indicators referred to in Recommendation E(1)(a) based on reporting data under Article 24 of Directive 2011/61/EU: (FC)**

The indicators included in Tables 1 and 2 of the ESMA guidelines are calculated using the AIFMD data received according to the reporting frequency set out in Article 110 of the AIFMD Level 2 Regulation. ESMA provides a description of all the indicators as well as the scope and the data source to calculate them in Tables 1 and 2.

**Qualitative and, where feasible, quantitative descriptions of the interpretation of the indicators in the context of the assessment framework: (LC)**

Annex II provides some case studies for illustrative purposes to guide competent authorities on what they should consider when deciding to impose leverage limits on an AIFM managing AIFs that pose risks to financial stability, based on the risk assessment performed using the two-step framework proposed by ESMA in its guidelines (page 27).

The annex of ESRB Recommendation E(1) states on page 40 that:

“To support a harmonised use of the indicators, ESMA is also advised to give guidance relating to the interpretation of the indicators. ESMA is currently in the process of building an EU-level dataset which will include all data reported to NCAs under Directive 2011/61/EU at national level. Once it is available, this dataset should allow ESMA to develop quantitative perspectives on the interpretation of the indicators within the assessment framework, e.g. by examining basic summary statistics on individual indicators such as the mean, median, minimum and maximum reported values, and the distribution of reported values.”

---

11 Economic rationale for ESRB Recommendation E(1), pages 40-42: ESMA should provide guidance on an assessment framework that is operable. As a guiding principle, indicators should only be part of the framework when they make it significantly easier to assess the contribution of investment funds and the AIF sector as a whole to leverage-related systemic risks. ESMA’s guidance on the assessment framework should provide a sufficient basis for NCAs to explain their decision to take macroprudential policy measures.

The Assessment Team acknowledges that Annex II of ESMA’s guidelines on Article 25 of Directive 2011/61/EU provide some case studies to which competent authorities should pay attention when deciding to impose leverage limits on AIFMs managing AIFs that pose risks for financial stability. The Assessment Team also understands that there are different types of investment funds and investment strategies, so that a “one-size-fits-all” interpretation of the indicators may not work. However, ESMA should have developed more detailed guidelines on how to interpret the indicators or should have provided quantitative descriptions of the indicators wherever possible. If these were not feasible, ESMA should have given reasons.

3.2.2 Recommendation E(2): macroprudential leverage limits

As mentioned in the previous section, Annex II of the ESMA guidelines on Article 25 of Directive 2011/61/EU provides some case studies for illustrative purposes to guide competent authorities on what they should consider when deciding to impose leverage limits on AIFMs managing AIFs that pose risks to financial stability, based on the investment fund type/profile and risk to be addressed. Paragraphs 21 and 22 on pages 27-28 of the ESMA guidelines indicate what NCAs should take into account when setting the appropriate leverage limits to evaluate their effectiveness in addressing the risks of market impact, fire sales, spillovers to financial counterparties and disruptions of credit intermediation, and their efficiency in mitigating excessive leverage.

On page 18, the ESMA guidelines state: “The calibration of leverage limits should be based on an assessment on whether the application of leverage limits would effectively limit the contribution of the leveraged fund(s) to the build-up of systemic risk.

When setting the appropriate level of leverage limits, NCAs should take into account their effectiveness in addressing the risk of market impact, fire sales, spillovers to financial counterparties, and disruptions of credit intermediation. In order to do so, NCAs should assess the likely impact of these measures on the risks:

NCAs should pay particular attention on how leverage can contribute to procyclicality, especially in times of economic cycle downturn or increase in market volatility.

If leverage limits are not efficient or not sufficient, NCAs should consider imposing other restrictions on the management of the AIFs.”

The economic rationale of ESRB Recommendation E(2) (pages 45-47) states that: leverage limits for AIFs may be deemed effective if they address the risk of (i) fire sales, (ii) spillovers to financial counterparties, and (iii) disruptions of credit intermediation. A “one-size-fits-all” limit might be simple to implement but could have major unintended consequences, such as making some business models unviable, significantly reducing the sector’s ability to absorb market shocks, or shifting activities to other, less regulated parts of the financial sector.

Leverage limits based on investment fund type and/or profile may be a useful instrument for NCAs in the short to medium term, enabling them to target those investment funds that contribute most to systemic risk.
For leverage limits to be efficient, the instrument should be simple and unintended consequences should be contained, i.e. leverage limits should be robust to gaming and arbitrage by market participants. Leverage limits should also be proportional to the systemic risk posed by the investment fund’s use of leverage, to ensure that the sector remains able to provide valuable services to the economy. For instance, investment funds should still be able to employ diverse and active strategies which could act as shock absorbers during market stress. Authorities should conduct a risk analysis based on data gathered pursuant to Directive 2011/61/EU and the risk indicators from a common risk assessment framework.

In accordance with the specific compliance criteria for the macroprudential leverage limits set out in the Recommendation, the guidance issued by ESMA should include:

A description of the various types of leverage limits, including an evaluation of their effectiveness and efficiency in mitigating excessive leverage: (LC)

In order to assess compliance with this recommendation, the Assessment Team considered the ESRB’s economic rationale for effectiveness and efficiency and what the ESMA guidelines say.

ESMA mentions different types of measures (e.g. “cyclical limits”, “continuous leverage limits”) but does not evaluate in detail their effectiveness and efficiency. In paragraphs 21 and 22 (pages 27-28) of its guidelines, ESMA states which items NCAs should take into account for evaluating the effectiveness and efficiency of leverage limits (e.g. when risks are directly related to the size of leverage, imposing leverage limits should aim at reducing the size of the risks or proportionality of the leverage limits to the systemic risk posed by the use of leverage by the AIFM). However, ESMA could also have evaluated various design options for leverage limits in terms of effectiveness and efficiency, as set out in Table 5 of the Recommendation, or it could have elaborated more on the advantages and disadvantages of the different types of leverage limits (e.g. cyclical limits or constant leverage limits), as set out in the Recommendation E(2):

“A ‘one-size-fits-all’ limit might be simple to implement but could have major unintended consequences. […] Leverage limits based on investment fund type and/or profile may be a useful instrument for NCAs in the short to medium term. […] In the longer term, cyclical leverage could also be explored. […] For the short to medium term a cyclical approach would not be feasible, however, as this would require a measure for the financial cycle and an indicator for a fund’s contribution, which would add an additional layer of complexity to this measure.”

A set of principles to be taken into account by the NCAs when calibrating leverage limits: (FC)

As a minimum such principles should include all of the following:

(i) a statement that provides for leverage limits to be based on the leverage measures set out in Directive 2011/61/EU;

(ii) criteria for applying leverage limits;

(iii) principles regarding the periodic review of leverage limits.

ESMA guidelines indicate what NCAs should consider when imposing leverage limits for (i) and (ii):
• risks posed by AIFs according to their type (hedge funds, private equity, real estate, fund of funds or any other relevant type) and risk profile as defined by the risk assessment performed in accordance with paragraph 12;

• risks posed by common exposures.

ESMA provides guidance on how competent authorities should implement leverage limits, both in terms of timing and phasing in and out (paragraph 20, page 27 of the ESMA guidelines):

(a) where competent authorities impose continuous leverage limits to an AIF or a group of AIFs posing a threat to financial stability, the limits should be maintained for as long as the risks posed by the AIF or the group of AIFs do not decrease;

(b) when competent authorities impose temporary leverage limits to limit the build-up of risk, including any procyclical behaviour from an AIF or a group of AIFs, such as when the AIF contributes to excessive credit growth or the formation of excessive asset prices, the limits should be released when the change in market conditions or AIF’s behaviour stops being procyclical;

(c) competent authorities should implement leverage limits progressively (“the phased-in period”) to avoid procyclicality, especially if imposing limits in a procyclical way could trigger the risk they intend to mitigate; and

(d) competent authorities should take into account the possibility to apply cyclical limits to dampen the build-up and materialisation of risks in the upswing and downswing phases of the financial cycle.

A set of principles to be taken into account by the NCAs when considering the imposition of leverage limits: (FC)

The set of principles should cover all of the following:

1. Principles for a balanced approach between rules-based versus discretionary limit setting;

Where competent authorities determine that a group of AIFs of the same type and similar risk profiles may collectively pose leverage-related systemic risks, they should apply leverage limits in a similar or identical manner to all AIFs in that group of AIFs (paragraph 19, page 27 of the ESMA guidelines).

Competent authorities should take into consideration the robustness of leverage limits to gaming and arbitrage, in particular: (i) where competent authorities determine that an AIF may pose leverage-related systemic risks, the same limits should be considered for different types of AIFs but with similar risk profiles, as defined by the risk assessment, in order to avoid the situation where an AIFM would declare a different type of AIF to avoid leverage limits; and (ii) the complexity of the calibration (paragraph 22, page 28 of the ESMA guidelines).
2. Principles relating to the interaction with other policy measures;

When risks are partially related to size, but imposing limits may not reduce risks in the same proportion because AIFs can adjust their strategy to maintain the same level of risk, competent authorities should consider imposing other restrictions on the management of the AIFs (for example, restrictions on the investment policy, redemption policy or risk policy) (paragraph 21, page 27 of the ESMA guidelines).

3. Principles for coordination among NCAs.

Competent authorities should communicate the results of their risk assessment to ESMA at least on an annual basis and anytime they identify a risk relevant for financial stability. Competent authorities should inform other EU competent authorities where the operations or arrangements made by the AIFM in other EU jurisdictions may pose risks relevant to financial stability and the integrity of the financial system (paragraph 17, page 24 of the ESMA guidelines).

3.2.3 Recommendation E(3): notification procedure

ESMA’s guidelines on notification are set out in detail in the document “Procedure for imposing leverage limits under Article 25 of the Alternative Investment Fund Managers Directive (ESMA34-32-700)”. The term “notification” is also mentioned in the other documents but only once. Therefore, the assessment of compliance was based only on the aforementioned document.

In accordance with the specific compliance criteria for the notification procedure set out in the Recommendation, the guidance issued by ESMA should include:

**An efficient working procedure: (FC)**

ESMA has developed a working procedure that is operational, practical, easy to understand and to use, and that at the same time is efficient and adequate.

In addition, ESMA has developed a working procedure that minimises delays and increases flexibility. After the obligation to notify ESMA, the “timely” process is ensured by “the exchange of views between ESMA and ESRB and other relevant authorities through teleconferences” (page 3 of the ESMA guidance), which ensures the ability of the NCA to act in a timely manner. Even if the competent authority intends to not comply with ESMA’s advice, there is a procedure for “notice of explanation” (page 4 of the ESMA guidance) whereby the competent authority can provide its reasoning for non-compliance.

In essence, competent authorities have to make sure that they follow the notification procedure to ESMA, whereas they could do so in a timely manner with the imposition of measures.

**Template for notification letters: (FC)**

The template for notification letters is explicitly and thoroughly addressed in Annex I of document ESMA34-32-700, and it is entitled “Template for the notification of imposing limits on leverage employed by AIFMs under Article 25(3) of the AIFMD”. It is structured as (A) Identification of the
Recommendations C and E of the European Systemic Risk Board of 7 December 2017 on liquidity and leverage risks in investment funds (ESRB/2017/6) September 2021

ESMA assessment report

competent authority, (B) Nature of the proposed measure, (C) Description of the precise nature of the restriction, (D) Justification and legal basis, (E) Member State affected, and (F) Additional information.

**Template for reporting requirements as regards the NCAs’ assessment of the need to implement macroprudential measures pursuant to Article 25(3) of Directive 2011/61/EU: (FC)**

The template for NCAs’ assessment is explicitly and thoroughly addressed in Annex 2 of the document, and it is entitled “Template for advice of the European Securities and Markets Authority of DD MM YYYY on [a] proposed or taken measure[s] by [competent authority] under Article 25 of Directive 2011/61/EU”. It is structured as (I.) Legal basis, (II.) Background, (III.) On the adverse events or developments, (IV.) On the appropriateness of the measure[s], and (V.) On the duration of measures.

**Regulatory arbitrage and proportionality: (FC)**

Regulatory arbitrage and proportionality are mentioned on page 28 of the guidelines on Article 25 of Directive 2011/61/EU, whereby competent authorities should take this into account when evaluating the efficiency of leverage limits in mitigating excessive leverage. Explicit reference to the notification procedure is not made. However, regulatory arbitrage is implicitly acknowledged for notification, as the guidance states how authorities should take into account the interaction of AIFMs (page 5) as well as the coordination role assumed by ESMA (page 1). In essence, an efficient notification procedure helps authorities to choose effective leverage limits and avoid regulatory arbitrage and leakages. Although proportionality is not mentioned explicitly, the Assessment Team found no evidence that ESMA acted in a disproportionate manner. The notification procedures strike the right balance between maximising the scope of and potential gains from increased risk monitoring and the potential costs generated by the new reporting requirements. ESMA’s advice in the notification template should address the fact that “measures are appropriate to address the concerns relating to the stability and integrity of the financial system” (page 9).

3.2.4 Recommendation E(4): benchmarking

With respect to Recommendation E(4), ESMA indicated in its reply letter of 16 December 2020 that it would share knowledge with macroprudential authorities and the ESRB on practices in relation to the use of leverage limits and the imposition of other restrictions once it had received any notification under Article 25(3) of the AIFMD and gained sufficient experience in this field (see Section 2.2 above).

Nevertheless, ESMA followed the approach of providing guidelines, namely those on Article 25 of Directive 2011/61/EU. In this vein, ESMA demonstrated its facilitation and coordination role to try to ensure that a consistent approach is taken by NCAs in relation to the proposed measures.

**The results, if any, of ESMA’s benchmarking exercise: (SE)**

No results of any benchmarking exercise are currently available.

**The practices, if any, in relation to the use of leverage limits: (SE)**
No practices have been shared to date. ESMA’s final report includes the NCAs’ responses in relation to leverage limits. For instance, on pages 11 and 12, ESMA stresses that “if NCAs have to impose leverage limits because of a threat to financial stability, it is very likely that the threat would stem from several AIFs and not from a single AIF. However, this does not mean that leverage limits should be automatically the same for all AIFs of the group and ESMA expects NCAs to adopt leverage limits that are tailored to the characteristics of each AIF that collectively create a risk for the stability of financial markets”.

The practices, if any, in relation to the imposition of other restrictions on the management of AIFs using information received from the NCAs pursuant to Article 25(3) of Directive 2011/61/EU: (SE)

The guidelines on Article 25 of Directive 2011/61/EU outline other restrictions (page 28) that could be imposed on AIFMs by NCAs, stating that “competent authorities should consider imposing other restrictions on the management of the AIFs (for example, restrictions on the investment policy, redemption policy or risk policy)” and that “competent authorities should impose other restrictions on the management of the AIF, at least until the end of the phased-in period”.

Regulatory arbitrage and proportionality: (SE)

Regulatory arbitrage and proportionality are mentioned on page 28 of the guidelines on Article 25 of Directive 2011/61/EU, whereby NCAs should take this into account when evaluating the efficiency of leverage limits in mitigating excessive leverage. The avoidance of regulatory arbitrage is also implicitly assumed, with the guidelines outlining that among their benefits there is also a need for common practices in order to avoid a situation whereby some Member States could adopt different rules, thus creating greater uncertainty in the effective use of the extensive information available to NCAs under Directive 2011/61/EU (pages 14, 17 and 18).

Finally, regarding proportionality, the Assessment Team found no evidence that ESMA acted in a disproportionate manner. It is stated in the guidelines on Article 25 of Directive 2011/61/EU that “the option of calibrating the limits based on the fund profile and the efficiency of the limits in reducing the risk, should be more proportionate, limit the build-up of systemic risk and improve financial stability. The possibility to impose other restrictions to the management acknowledge the risks of unintended effect during the phase-in period” (page 18).
Conclusions

The Recommendation includes five recommendations (A, B, C, D and E), three of which are addressed to the Commission (A, B and D) and two to ESMA (C and E). As the compliance assessment of the three recommendations addressed to the Commission will be carried out at a later stage, this report only deals with the compliance assessment of Recommendations C and E addressed to ESMA.

The overall compliance assessment of Recommendation C (stress testing) and E (guidance on Article 25 of Directive 2011/61/EU) of the Recommendation shows a significantly high degree of compliance. In its guidelines on liquidity stress testing in UCITS and AIFs, ESMA provides detailed and comprehensive guidance on the practices to be followed by managers for the stress testing of liquidity risks for AIFs and UCITS. Its guidelines on Article 25 of Directive 2011/61/EU provide clear guidance on the assessment of leverage-related systemic risk as well as on macroprudential leverage limits. Furthermore, ESMA has developed useful guidance on the notification procedure for imposing leverage limits under Article 25 of Directive 2011/61/EU, via the use of a specific template.

With regard to Recommendation C (stress testing), ESMA was graded as fully compliant. This is because ESMA’s guidelines on liquidity stress testing in UCITS and AIFs deal with the design of liquidity stress testing scenarios and liquidity stress testing policies, but also assess the asset and liability sides of investment funds’ balance sheets as well as the timing and frequency for individual funds to conduct liquidity stress tests, in line with the ESRB Recommendation. Furthermore, ESMA considered additional aspects that go beyond the ESRB Recommendation, such as combining asset and liability stress testing, aggregating liquidity stress testing across funds and taking into account risks arising from less liquid assets.

With regard to Recommendation E (guidance on Article 25 of Directive 2011/61/EU), which is divided into the four Recommendations E(1), E(2), E(3) and E(4), the compliance assessment shows an overall grade of fully compliant for Recommendations E(1), E(2) and E(3). This grade is an overall result, as the Assessment Team judged that most of the requirements included in Recommendations E(1), E(2) and E(3) had been completely fulfilled by ESMA, except for two requirements that ESMA had met almost entirely but not fully. The first requirement concerns Recommendation E(1)(c), for which the ESRB required that ESMA’s guidance on the assessment of leverage-related systemic risk should also include qualitative and, where feasible, quantitative descriptions of the interpretation of the indicators in the context of the assessment framework. The Assessment Team understands that there are different types of investment funds and investment strategies, so that a “one-size-fits-all” interpretation of the indicators may not work. However, ESMA should have developed more detailed guidelines on how to interpret the indicators or should have provided quantitative descriptions of the indicators wherever possible. If these were not feasible, ESMA should have given reasons.

The second requirement concerns Recommendation E(2)(a), for which the ESRB asked ESMA to include a description of the various types of leverage limits, comprising an evaluation of their effectiveness and efficiency in mitigating excessive leverage. The Assessment Team understands that ESMA elaborated on different types of leverage limits in its guidelines on Article 25 of Directive
2011/61/EU, but neither the effectiveness nor the efficiency of these different types of limits are evaluated in detail.

For Recommendation E(4), ESMA was given the compliance grade “sufficiently explained”. Recommendation E(4) requires ESMA to share, on an annual basis, any results of its benchmarking exercise and any practices in relation to the use of leverage limits received from NCAs pursuant to Article 25(3) of Directive 2011/61/EU. ESMA explained that it had not received any notification under Article 25(3) from a competent authority to date, because this tool had never been used by NCAs, and had therefore not been able to start the benchmarking exercise yet.
Annex I: Composition of the Assessment Team

(approved by the ATC via Written Procedure ATC/WP/2021/005)

<table>
<thead>
<tr>
<th>Chairperson</th>
<th>Institutions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jaga Gänßler</td>
<td>Bundesanstalt für Finanzdienstleistungsaufsicht</td>
</tr>
<tr>
<td><strong>Assessment Team</strong></td>
<td></td>
</tr>
<tr>
<td>Mario Cappabianca</td>
<td>Banca d’Italia</td>
</tr>
<tr>
<td>Thomas Garcia</td>
<td>Banque de France</td>
</tr>
<tr>
<td>Konstantinos Kannellopoulos</td>
<td>Bank of Greece</td>
</tr>
<tr>
<td>Jens Lorenz</td>
<td>Bundesanstalt für Finanzdienstleistungsaufsicht</td>
</tr>
<tr>
<td>Charles O’Donnell</td>
<td>European Central Bank</td>
</tr>
<tr>
<td>Marloes Van Rijsbergen</td>
<td>European Commission</td>
</tr>
<tr>
<td>Cristina Vespro</td>
<td>European Commission</td>
</tr>
<tr>
<td>Hannes Wilke</td>
<td>Deutsche Bundesbank</td>
</tr>
<tr>
<td><strong>Secretariat</strong></td>
<td></td>
</tr>
<tr>
<td>Camille Graciani</td>
<td>Macro-Prudential Development</td>
</tr>
<tr>
<td>Aleksandra Granat</td>
<td>Legal Team</td>
</tr>
<tr>
<td>Federico Pistelli</td>
<td>Legal Team</td>
</tr>
<tr>
<td>Ridha Sahli</td>
<td>Legal Team</td>
</tr>
</tbody>
</table>
The above standards have been used to ensure consistent and equal treatment of addressees.

### Recommendation C (stress testing)

**ESMA**'s guidelines on liquidity stress testing include, but are not limited to:

- the design of liquidity stress testing scenarios;
- the liquidity stress test policy, including internal use of liquidity stress test results;
- considerations for the asset and liability sides of investment fund balance sheets;
- the timing and frequency for individual funds to conduct the liquidity stress tests;
- compliance with the stress testing requirements set out in Directive 2011/61/EU and how market participants carry out stress testing.

**SE** N/A

**PC** ESMA’s guidelines on liquidity stress testing include most of the following aspects:

- the design of liquidity stress testing scenarios;
- the liquidity stress test policy, including internal use of liquidity stress test results;
- considerations for the asset and liability sides of investment fund balance sheets;
- the timing and frequency for individual funds to conduct the liquidity stress tests;
- compliance with the stress testing requirements set out in Directive 2011/61/EU and how market participants carry out stress testing.

**MN** ESMA’s guidelines on liquidity stress testing only include some of the following aspects:

- the design of liquidity stress testing scenarios;
- the liquidity stress test policy, including internal use of liquidity stress test results;
- considerations for the asset and liability sides of investment fund balance sheets;
- compliance with the stress testing requirements set out in Directive 2011/61/EU and how market participants carry out stress testing.

**NC** ESMA’s guidelines on liquidity stress testing hardly include any of the following aspects:

- the design of liquidity stress testing scenarios;
- the liquidity stress test policy, including internal use of liquidity stress test results;
- considerations for the asset and liability sides of investment fund balance sheets;
- compliance with the stress testing requirements set out in Directive 2011/61/EU and how market participants carry out stress testing.

**IE** N/A

FC: ESMA's guidance on the framework to assess leverage-related systemic risk includes the following aspects:
• a common minimum set of indicators to be taken into account by the NCAs during their assessment. These indicators should: (1) facilitate assessment of the level, source and different usages of leverage; (2) facilitate assessment of the main channels through which systemic risk may materialise, i.e. fire sales, direct spillovers to financial institutions, and the interruption of credit intermediation; and (3) be operable and sufficient for NCAs to inform ESMA, in connection with its advice under Article 25(6) of Directive 2011/61/EU and the principles laid down in Article 112 of Commission Delegated Regulation (EU) No 231/2013, whether the conditions for imposing leverage limits or other restrictions on the management of AIFs have been met;
• instructions to calculate the above indicators based on reporting data under Article 24 of Directive 2011/61/EU;
• qualitative and, where feasible, quantitative descriptions of the interpretation of the indicators in the context of the assessment framework.

LC: ESMA's guidance on the framework to assess leverage-related systemic risk includes the following aspects but with some limitations:
• a common minimum set of indicators to be taken into account by the NCAs during their assessment. These indicators should: (1) facilitate assessment of the level, source and different usages of leverage; (2) facilitate assessment of the main channels through which systemic risk may materialise, i.e. fire sales, direct spillovers to financial institutions, and the interruption of credit intermediation; and (3) be operable and sufficient for NCAs to inform ESMA, in connection with its advice under Article 25(6) of Directive 2011/61/EU and the principles laid down in Article 112 of Commission Delegated Regulation (EU) No 231/2013, whether the conditions for imposing leverage limits or other restrictions on the management of AIFs have been met;
• instructions to calculate the indicators based on reporting data under Article 24 of Directive 2011/61/EU;
• qualitative and, where feasible, quantitative descriptions of the interpretation of the indicators in the context of the assessment framework.

SE: N/A

PC: ESMA's guidance on the framework to assess leverage-related systemic risk fails to include some of the following aspects:
• a common minimum set of indicators to be taken into account by the NCAs during their assessment. These indicators should: (1) facilitate assessment of the level, source and different usages of leverage; (2) facilitate assessment of the main channels through which systemic risk may materialise, i.e. fire sales, direct spillovers to financial institutions, and the interruption of credit intermediation; and (3) be operable and sufficient for NCAs to inform ESMA, in connection with its advice under Article 25(6) of Directive 2011/61/EU and the principles laid down in Article 112 of Commission Delegated Regulation (EU) No 231/2013, whether the conditions for imposing leverage limits or other restrictions on the management of AIFs have been met;
• instructions to calculate the indicators based on reporting data under Article 24 of Directive 2011/61/EU;
• qualitative and, where feasible, quantitative descriptions of the interpretation of the indicators in the context of the assessment framework.

MN: ESMA's guidance on the framework to assess leverage-related systemic risk only includes some of the following aspects:
• a common minimum set of indicators to be taken into account by the NCAs during their assessment. These indicators should: (1) facilitate assessment of the level, source and different usages of leverage; (2) facilitate assessment of the main channels through which systemic risk may materialise, i.e. fire sales, direct spillovers to financial institutions, and the interruption of credit intermediation; and (3) be operable and sufficient for NCAs to inform ESMA, in connection with its advice under Article 25(6) of Directive 2011/61/EU and the principles laid down in Article 112 of Commission Delegated Regulation (EU) No 231/2013, whether the conditions for imposing leverage limits or other restrictions on the management of AIFs have been met;
• instructions to calculate the indicators referred to in point E(1)(a) based on reporting data under Article 24 of Directive 2011/61/EU;
• qualitative and, where feasible, quantitative descriptions of the interpretation of the indicators in the context of the assessment framework.
ESMA’s guidance on the framework to assess leverage-related systemic risk includes hardly any or none of the following aspects:

- a common minimum set of indicators to be taken into account by the NCAs during their assessment. These indicators should:
  1. facilitate assessment of the level, source and different usages of leverage;
  2. facilitate assessment of the main channels through which systemic risk may materialise, i.e. fire sales, direct spillovers to financial institutions, and the interruption of credit intermediation; and
  3. be operable and sufficient for NCAs to inform ESMA, in connection with its advice under Article 25(6) of Directive 2011/61/EU and the principles laid down in Article 112 of Commission Delegated Regulation (EU) No 231/2013, whether the conditions for imposing leverage limits or other restrictions on the management of AIFs have been met;
- instructions to calculate the indicators referred to in point E(1)(a) based on reporting data under Article 24 of Directive 2011/61/EU;
- qualitative and, where feasible, quantitative descriptions of the interpretation of the indicators in the context of the assessment framework.

IE: N/A
Recommendation E(2) (guidance on Article 25 of Directive 2011/61/EU)

**EC** ESMA’s guidance on the design, calibration, and implementation of macroprudential leverage limits includes the following aspects:
- a description of the various types of leverage limits, including an evaluation of their effectiveness and efficiency in mitigating excessive leverage;
- a set of principles to be taken into account by the NCAs when calibrating leverage limits. As a minimum such principles should include all of the following: (i) a statement that provides for leverage limits to be based on the leverage measures set out in Directive 2011/61/EU; (ii) criteria for applying leverage limits; and (iii) principles regarding the periodic review of leverage limits;
- a set of principles to be taken into account by the NCAs when considering the imposition of leverage limits, as a minimum covering all of the following: (i) principles for a balanced approach between rules-based versus discretionary limit setting; (ii) principles relating to the interaction with other policy measures; and (iii) principles for coordination among Union authorities.

**SE** N/A

**PC** ESMA’s guidance on the design, calibration, and implementation of macroprudential leverage limits includes almost all of the following aspects:
- a description of the various types of leverage limits, including an evaluation of their effectiveness and efficiency in mitigating excessive leverage;
- a set of principles to be taken into account by the NCAs when calibrating leverage limits. As a minimum such principles should include all of the following: (i) a statement that provides for leverage limits to be based on the leverage measures set out in Directive 2011/61/EU; (ii) criteria for applying leverage limits; and (iii) principles regarding the periodic review of leverage limits;
- a set of principles to be taken into account by the NCAs when considering the imposition of leverage limits, as a minimum covering all of the following: (i) principles for a balanced approach between rules-based versus discretionary limit setting; (ii) principles relating to the interaction with other policy measures; and (iii) principles for coordination among Union authorities.

**MN** ESMA’s guidance on the design, calibration, and implementation of macroprudential leverage limits only includes some of the following aspects:
- a description of the various types of leverage limits, including an evaluation of their effectiveness and efficiency in mitigating excessive leverage;
- a set of principles to be taken into account by the NCAs when calibrating leverage limits. As a minimum such principles should include all of the following: (i) a statement that provides for leverage limits to be based on the leverage measures set out in Directive 2011/61/EU; (ii) criteria for applying leverage limits; and (iii) principles regarding the periodic review of leverage limits;
- a set of principles to be taken into account by the NCAs when considering the imposition of leverage limits, as a minimum covering all of the following: (i) principles for a balanced approach between rules-based versus discretionary limit setting; (ii) principles relating to the interaction with other policy measures; and (iii) principles for coordination among Union authorities.

<table>
<thead>
<tr>
<th>Country</th>
<th>Description</th>
</tr>
</thead>
</table>
| NC      | ESMA’s guidance on the design, calibration, and implementation of macroprudential leverage limits includes hardly any or none of the following aspects:  
- a description of the various types of leverage limits, including an evaluation of their effectiveness and efficiency in mitigating excessive leverage;  
- a set of principles to be taken into account by the NCAs when calibrating leverage limits. As a minimum such principles should include all of the following: (i) a statement that provides for leverage limits to be based on the leverage measures set out in Directive 2011/61/EU; (ii) criteria for applying leverage limits; and (iii) principles regarding the periodic review of leverage limits;  
- a set of principles to be taken into account by the NCAs when considering the imposition of leverage limits, as a minimum covering all of the following: (i) principles for a balanced approach between rules-based versus discretionary limit setting; (ii) principles relating to the interaction with other policy measures; and (iii) principles for coordination among Union authorities. | N/A |
| IE      | N/A |


<table>
<thead>
<tr>
<th>Country</th>
<th>Description</th>
</tr>
</thead>
</table>
| FC      | ESMA’s guidance on notification procedures includes, but is not limited to:  
- an efficient working procedure;  
- a template for notification letters;  
- a template for reporting requirements as regards the NCAs’ assessment of the need to implement macroprudential measures pursuant to Article 25(3) of Directive 2011/61/EU. | |
| LC      | ESMA’s guidance on notification procedures is limited to:  
- an efficient working procedure;  
- a template for notification letters;  
- a template for reporting requirements as regards the NCAs’ assessment of the need to implement macroprudential measures pursuant to Article 25(3) of Directive 2011/61/EU. | |
| SE      | N/A |
| PC      | ESMA’s guidance on notification procedures includes most of the following aspects:  
- an efficient working procedure;  
- a template for notification letters;  
- a template for reporting requirements as regards the NCAs’ assessment of the need to implement macroprudential measures pursuant to Article 25(3) of Directive 2011/61/EU. | |
| MN      | ESMA’s guidance on notification procedures includes some of the following aspects:  
- an efficient working procedure;  
- a template for notification letters;  
- a template for reporting requirements as regards the NCAs’ assessment of the need to implement macroprudential measures pursuant to Article 25(3) of Directive 2011/61/EU. | |
| NC      | ESMA’s guidance on notification procedures includes hardly any of the following aspects:  
- an efficient working procedure;  
- a template for notification letters;  
- a template for reporting requirements as regards the NCAs’ assessment of the need to implement macroprudential measures pursuant to Article 25(3) of Directive 2011/61/EU. | N/A |
### Recommendation E(4) (guidance on Article 25 of Directive 2011/61/EU)

| FC | ESMA shares, on an annual basis, with national macroprudential authorities and the ESRB the following information:  
|    | • the results, if any, of its benchmarking exercise;  
|    | • the practices, if any, in relation to the use of leverage limits;  
|    | • the practices, if any, in relation to the imposition of other restrictions on the management of AIFs using information received from the NCAs pursuant to Article 25(3) of Directive 2011/61/EU. |

| FC | ESMA shares, on an annual basis, with national macroprudential authorities and the ESRB almost all of the following information:  
|    | • the results, if any, of its benchmarking exercise;  
|    | • the practices, if any, in relation to the use of leverage limits;  
|    | • the practices, if any, in relation to the imposition of other restrictions on the management of AIFs using information received from the NCAs pursuant to Article 25(3) of Directive 2011/61/EU. |

| FC | ESMA shares, on an annual basis, with national macroprudential authorities and the ESRB most of the following information:  
|    | • the results, if any, of its benchmarking exercise;  
|    | • the practices, if any, in relation to the use of leverage limits;  
|    | • the practices, if any, in relation to the imposition of other restrictions on the management of AIFs using the information received from the NCAs pursuant to Article 25(3) of Directive 2011/61/EU. |

| MN | ESMA does not share, on an annual basis, with national macroprudential and the ESRB any of the following information:  
|    | • the results, if any, of its benchmarking exercise;  
|    | • the practices, if any, in relation to the use of leverage limits;  
|    | • the practices, if any, in relation to the imposition of other restrictions on the management of AIFs using the information received from the NCAs pursuant to Article 25(3) of Directive 2011/61/EU;  
|    | but provides sufficient justification for inaction. |

| PC | ESMA shares, on an annual basis, with national macroprudential authorities and the ESRB most of the following information:  
|    | • the results, if any, of its benchmarking exercise;  
|    | • the practices, if any, in relation to the use of leverage limits;  
|    | • the practices, if any, in relation to the imposition of other restrictions on the management of AIFs using the information received from the NCAs pursuant to Article 25(3) of Directive 2011/61/EU. |

| MN | ESMA shares, on an annual basis, with national macroprudential authorities and the ESRB some of the following information:  
|    | • the results, if any, of its benchmarking exercise;  
|    | • the practices, if any, in relation to the use of leverage limits;  
|    | • the practices, if any, in relation to the imposition of other restrictions on the management of AIFs using the information received from the NCAs pursuant to Article 25(3) of Directive 2011/61/EU. |

| NC | ESMA shares, on an annual basis, with national macroprudential and the ESRB hardly any or none of the following information:  
|    | • the results, if any, of its benchmarking exercise;  
|    | • the practices, if any, in relation to the use of leverage limits;  
|    | • the practices, if any, in relation to the imposition of other restrictions on the management of AIFs using the information received from the NCAs pursuant to Article 25(3) of Directive 2011/61/EU. |

| IE | N/A |
### Abbreviations

#### I. Compliance grades

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>FC</td>
<td>fully compliant</td>
</tr>
<tr>
<td>LC</td>
<td>largely compliant</td>
</tr>
<tr>
<td>PC</td>
<td>partially compliant</td>
</tr>
<tr>
<td>MN</td>
<td>materially non-compliant</td>
</tr>
<tr>
<td>NC</td>
<td>non-compliant</td>
</tr>
<tr>
<td>IE</td>
<td>inaction insufficiently explained</td>
</tr>
<tr>
<td>SE</td>
<td>inaction sufficiently explained</td>
</tr>
</tbody>
</table>

#### II. Other abbreviations

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>AIF</td>
<td>alternative investment fund</td>
</tr>
<tr>
<td>BOS</td>
<td>Board of Supervisors</td>
</tr>
<tr>
<td>ECB</td>
<td>European Central Bank</td>
</tr>
<tr>
<td>ESRB</td>
<td>European Systemic Risk Board</td>
</tr>
<tr>
<td>ESRB Handbook</td>
<td>Handbook on the assessment of compliance with ESRB recommendations (April 2016)</td>
</tr>
<tr>
<td>EU/Union</td>
<td>European Union</td>
</tr>
<tr>
<td>Handbook</td>
<td>Handbook on the assessment of compliance with ESRB recommendations (April 2016)</td>
</tr>
<tr>
<td>LST</td>
<td>Liquidity stress testing</td>
</tr>
<tr>
<td>NCA</td>
<td>National competent authority</td>
</tr>
<tr>
<td>UCITS</td>
<td>Undertakings for collective investment in transferable securities</td>
</tr>
</tbody>
</table>
This Compliance report is based on the results of the assessment conducted by the Assessment Team and was prepared by:

**Jaga Gänßler (Chairperson)**
Bundesanstalt für Finanzdienstleistungsaufsicht

**Mario Cappabianca**
Banca d’Italia

**Thomas García**
Banque de France

**Konstantinos Kanellopoulos**
Bank of Greece

**Jens Lorenz**
Bundesanstalt für Finanzdienstleistungsaufsicht

**Charles O’Donnell**
European Central Bank

**Marloes Van Rijsbergen**
European Commission

**Cristina Vespro**
European Commission

**Hannes Wilke**
Deutsche Bundesbank

**Camille Graciani**
ESRB Secretariat

**Aleksandra Granat**
ESRB Secretariat

**Federico Pistelli**
ESRB Secretariat

**Ridha Sahli**
ESRB Secretariat

© European Systemic Risk Board, 2020

Postal address 60640 Frankfurt am Main, Germany
Telephone +49 69 1344 0
Website www.esrb.europa.eu

All rights reserved. Reproduction for educational and non-commercial purposes is permitted provided that the source is acknowledged.

The cut-off date for the data included in this report was 30 June 2021.

For specific terminology please refer to the ESRB glossary (available in English only).