Thematic Review on Liquidity Risk Management Recommendations

Final Report

THE BOARD OF THE
INTERNATIONAL ORGANIZATION OF SECURITIES COMMISSIONS

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EXECUTIVE SUMMARY

This report sets out the results and observations of the Thematic Review (Review) by the International Organization of Securities Commissions (IOSCO) of the extent to which participating IOSCO member jurisdictions have implemented regulatory measures regarding the key recommendations in IOSCO's 2018 Recommendations for Liquidity Risk Management for Collective Investment Schemes (LRM Report).[1] The Review helps to monitor whether IOSCO members have put in place appropriate regulatory requirements for LRM processes to be set up by entities responsible for the overall operations of open-ended collective investment schemes[2] (Responsible Entities or REs),[3] and conduct appropriate oversight of RE's LRM processes, in both normal and stressed market conditions. Money market funds and exchange-traded funds have been excluded from the scope of funds/CIS covered by the Review due to their unique characteristics.

The global pandemic required market participants to respond quickly to the March 2020 events and to continue to monitor for liquidity risk. The publication of the LRM Report in 2018 provided an opportunity for members of IOSCO to make adjustments, as necessary, to their regulatory framework and, in many instances, for market participants to have updated their liquidity risk management processes appropriately.

The LRM Report includes 17 recommendations. In this context, the Review looked at five recommendations related to the collective investment scheme design process (Recommendations 1, 2, 3, 4, and 7); three recommendations on day-to-day liquidity management (Recommendations 10, 12, and 14); and two recommendations on liquidity contingency planning (Recommendations 16 and 17). These ten recommendations from the LRM Report (**Recommendations**) form the basis for the Review.

A review team representing ten IOSCO member jurisdictions[4] and the IOSCO Secretariat (**Review Team** or **RT**) developed and applied a methodology (see Section 3) with three components: (i) an assessment of fourteen IOSCO members' regulatory frameworks for consistency with the Recommendations; (ii) an assessment of eleven other IOSCO member jurisdictions for implementation of the Recommendations; and (iii) an implementation effectiveness analysis of how Responsible Entities operated in practice.

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1 IOSCO, Recommendations for Liquidity Risk Management for Collective Investment Schemes, Final Report, Report of the Board of IOSCO, February 2018, available at https://www.iosco.org/library/pubdocs/pdf/IOSCOPD590.pdf

2 The LRM Report defines open-ended collective investment schemes (CIS) as registered/authorised/public CIS which provides redemption rights to its investors from its assets, based on the net asset value of the CIS, on a regular periodic basis during its lifetime - in many cases on a daily basis, although this can be less frequently.

3 The RE may or may not be the CIS itself. It could, for example, be a corporate parent of the affiliate, a self-regulatory organization, or an affiliate of an authority.

4 The RT was led by Emily Pierce from US SEC and the RT was composed of Brazil CVM (Daniel Walter Maeda Bernardo); France AMF (Franck Raillon); Hong Kong SFC (Queenie Pang, Catherine Chan, Silver Ho, and Dorothy Tsim); IOSCO GS (Josafat De Luna-Martinez); Italy Consob (Daniela Gariboldi); Japan FSA (Shinya Fujiwara and Yoko Hato); New Zealand FMA (Nick Combs); the Dutch AFM (Thijs Oostveen); Spain CNMV (Gema Pedrón); United Kingdom FCA (James Hopegood and Mhairi Jackson); and United States CFTC (Nancy Doyle) and SEC (Judy Lee and Katrina Wilson)), with the assistance of the IOSCO General Secretariat (Raluca Tircoci-Craciun, Hemla Deenanath, and Lalida Chuayruk).

For the first component, fourteen IOSCO member jurisdictions (**Participating Jurisdictions**),[5] comprising over 92% of global assets under management (**AUM**), completed a detailed survey describing their LRM requirements in place as of December 2021 (the **Review Date**). The review of Participating Jurisdictions is a Level 2 assessment, meaning an assessment of whether Participating Jurisdictions have in place regulatory frameworks that are consistent with the Recommendations as of the Review Date. The Review Team assessed and rated the Participating Jurisdictions' responses for consistency of their implemented regulatory frameworks with the LRM Recommendations by analysing the applicable legislation, rules and guidance.

For the second component of the Review, an additional set of eleven IOSCO members[6] (**Additional Jurisdictions)** completed the same survey, including a self- assessment of whether relevant domestic regulatory measures have been adopted in their respective jurisdictions as of the Review Date.[7] (See Annex A for **Jurisdictions' Surveys**). While the Additional Jurisdictions responded to the same Jurisdictions' Survey, the review focused on whether relevant domestic regulatory measures have been adopted ("Level 1 assessment"), but they were not scored on consistency with the Recommendations. Rather, the assessment was limited to whether they have completed the process of adopting relevant domestic regulatory measures.

Because of the differences in the review approaches, the ratings for Participating Jurisdictions and Additional Jurisdictions are not comparable. For additional discussion of the rating methodology for both Participating and Additional Jurisdictions, including the different ratings scales, see Section 3 below.

For the third component of the Review, the Review Team analyzed the effectiveness of implementation of the LRM Recommendations through a broadly disseminated, voluntary survey to market participants (**Market Participants Survey**).[8] Seventy-six entities responded to the Market Participants Survey, including **Responsible Entities (REs)**[9] operating primarily in seventeen jurisdictions. The responding REs consist of (i) ten global REs who operate global funds with substantial AUM at or near, and some over, $1USD trillion (hereinafter **Large Global REs**) and (ii), REs with large AUM relative to their region and/or jurisdiction, as well as a few REs with relatively smaller AUM and REs from emerging markets (hereinafter **Medium and Small REs**). The Review Team also received responses from a few industry associations.

The Market Participants Survey was specifically designed to collect information from Responsible Entities both (i) on their adoption and practical implementation of the

[5] The fourteen Participating Jurisdictions were Australia, Brazil, Canada, China, France, Germany, India, Ireland, Japan, Luxembourg, Spain, Switzerland, United Kingdom, and the United States.

[6] While Russia was originally included in this list, in the immediate aftermath of the conflict in Ukraine, arrangements were put in place so that the Central Bank of Russia would not be able to participate in any respect in any IOSCO processes or fora until further notice (https://www.iosco.org/news/pdf/IOSCONEWS644.pdf).

[7] The eleven Additional Jurisdictions were Argentina, Hong Kong, Indonesia, Italy, Korea, Mexico, The Netherlands, Saudi Arabia, Singapore, South Africa, and Turkey. The Additional Jurisdictions are also all members of the Financial Stability Board.

[8] https://www.iosco.org/library/pubdocs/zip/IOSCO%20LRM%20Review%20-%20Market%20Participants%20Survey.zip

[9] For simplicity, responding entities to the Market Participant survey responses are referred to as REs. For many larger REs, the responding entity may operate several funds/CIS, but for some smaller respondents, the RE is in fact also the fund/CIS.

Recommendations as of the Review Date as well as (ii) specific targeted information on their LRM practices and experiences during the March 2020 market turmoil.

Key observations from the Review include, among others, the following:

- Seven of the fourteen Participating Jurisdictions are **Fully Consistent** with all ten Recommendations. While some gaps or shortcomings of different degrees of materiality have been observed in the other Participating Jurisdictions for one or more of the Recommendations, all fourteen Participating Jurisdictions are at least **Partly Consistent** with all ten Recommendations.

Box 1 summarizes the jurisdictional ratings for Participating Jurisdictions on consistency with the Recommendations. The detailed observations are discussed in Section 4 below.

Box 1 – Participating Jurisdictions

Rating Scale: **Fully Consistent** | **Broadly Consistent** | **Partly Consistent** | **Not Consistent** | **Not Applicable**

Jurisdiction	*------------Design Phase------------*					*---Day-to-day Operation---*			*--Contingency Planning---*	
	Rec.1	***Rec.2***	***Rec.3***	***Rec.4***	***Rec.7***	***Rec.10***	***Rec.12***	***Rec.14***	***Rec.16***	***Rec.17***
Australia	Broadly Consistent	Fully Consistent	Partly Consistent	Broadly Consistent	Broadly Consistent	Broadly Consistent	Broadly Consistent	Broadly Consistent	Fully Consistent	Fully Consistent
Brazil	Fully Consistent	Fully Consistent	Fully Consistent	Fully Consistent	Broadly Consistent	Fully Consistent	Fully Consistent	Broadly Consistent	Partly Consistent	Broadly Consistent
Canada[10]	Fully Consistent	Fully Consistent	Fully Consistent	Fully Consistent	Fully Consistent	Broadly Consistent	Broadly Consistent	Broadly Consistent	Fully Consistent	Broadly Consistent
China	Fully Consistent	Fully Consistent	Fully Consistent	Fully Consistent	Fully Consistent	Fully Consistent	Fully Consistent	Fully Consistent	Fully Consistent	Fully Consistent
France	Fully Consistent	Fully Consistent	Fully Consistent	Fully Consistent	Broadly Consistent	Fully Consistent	Fully Consistent	Fully Consistent	Fully Consistent	Fully Consistent
Germany	Fully Consistent	Fully Consistent	Fully Consistent	Fully Consistent	Fully Consistent	Fully Consistent	Fully Consistent	Fully Consistent	Fully Consistent	Fully Consistent
India	Fully Consistent	Fully Consistent	Fully Consistent	Broadly Consistent	Broadly Consistent	Fully Consistent	Broadly Consistent	Fully Consistent	Broadly Consistent	Fully Consistent
Ireland	Fully Consistent	Fully Consistent	Fully Consistent	Fully Consistent	Broadly Consistent	Fully Consistent	Fully Consistent	Fully Consistent	Fully Consistent	Fully Consistent
Japan	Fully Consistent	Fully Consistent	Fully Consistent	Fully Consistent	Fully Consistent	Fully Consistent	Fully Consistent	Fully Consistent	Fully Consistent	Fully Consistent
Luxembourg	Fully Consistent	Fully Consistent	Fully Consistent	Fully Consistent	Fully Consistent	Fully Consistent	Fully Consistent	Fully Consistent	Fully Consistent	Fully Consistent
Spain	Fully Consistent	Fully Consistent	Fully Consistent	Fully Consistent	Fully Consistent	Fully Consistent	Fully Consistent	Fully Consistent	Fully Consistent	Fully Consistent
Switzerland	Fully Consistent	Fully Consistent	Fully Consistent	Fully Consistent	Fully Consistent	Partly Consistent	Partly Consistent	Partly Consistent	Fully Consistent	Fully Consistent
United Kingdom	Fully Consistent	Fully Consistent	Fully Consistent	Fully Consistent	Fully Consistent	Fully Consistent	Fully Consistent	Fully Consistent	Fully Consistent	Fully Consistent
United States	Fully Consistent	Fully Consistent	Fully Consistent	Fully Consistent	Fully Consistent	Fully Consistent	Fully Consistent	Fully Consistent	Fully Consistent	Fully Consistent

- Four of the eleven Additional Jurisdictions received a rating for all ten Recommendations of **Final Adoption Measures Taken and in Force**. Five other Additional Jurisdictions have been rated for some of the ten Recommendations as **Final Adoption Measures Taken and in Force** or **Draft Adoption Measures Published**. The remaining two Additional Jurisdictions received a rating of **Draft Adoption Measures Not Published for almost all Recommendations**, indicating that no published steps have been taken to implement most of the Recommendations.

[10] Joint response by OSC/QAMF.

Box 2– Additional Jurisdictions

Rating Scale:	Final Adoption Measures taken and in force	Final Adoption Measures published but not yet taken or in force	Draft Adoption Measures published	Draft Adoption Measures not published	Not Applicable

Jurisdiction	*-----------Design Phase-----------*					*---Day-to-day Operation---*			*--Contingency Planning---*	
	Rec.1	*Rec.2*	*Rec.3*	*Rec.4*	*Rec.7*	*Rec.10*	*Rec.12*	*Rec.14*	*Rec.16*	*Rec.17*
Argentina										
Hong Kong										
Indonesia										
Italy										
Korea										
Mexico										
Netherlands										
Saudi Arabia										
Singapore										
South Africa										
Turkey										

- Across the ten Recommendations, overall there was broad consistency in Participating Jurisdictions with each of the Recommendations. For Additional Jurisdictions, there was a relatively high level of implementation for Recommendations 1 and 17. However, the implementation of other Recommendations is lacking in some Additional Jurisdictions.

(Recommendation 1). Thirteen Participating Jurisdictions are Fully Consistent with Recommendation 1, and one is Broadly Consistent. Nine Additional Jurisdictions have Final Adoption Measures taken and in force or Draft Adoption Measures published.

(Recommendation 2). All fourteen Participating Jurisdictions are Fully Consistent with Recommendation 2. Six Additional Jurisdictions have Final Adoption Measures taken and in force.

(Recommendation 3). Thirteen Participating Jurisdictions are Fully Consistent with Recommendation 3, and one is Partly Consistent. Six Additional Jurisdictions have Final Adoption Measures taken and in force.

(Recommendation 4). Twelve Participating Jurisdictions are Fully Consistent with Recommendation 4, and two are Broadly Consistent. Five Additional Jurisdictions have Final Adoption Measures taken and in force.

(Recommendation 7). Nine Participating Jurisdictions are Fully Consistent with Recommendation 7, and five are Broadly Consistent. Six Additional Jurisdictions have Final Adoption Measures taken and in force.

(Recommendation 10). Eleven Participating Jurisdictions are Fully Consistent with Recommendation 10, two are Broadly Consistent, and one is Partly Consistent. Seven Additional

Jurisdictions have Final Adoption Measures taken and in force or Draft Adoption Measures published.

(Recommendation 12). Ten Participating Jurisdictions are Fully Consistent with Recommendation 12, three are Broadly Consistent, and one is Partly Consistent. Four Additional Jurisdictions have Final Adoption Measures taken and in force.

(Recommendation 14). Ten Participating Jurisdictions are Fully Consistent with Recommendation 14, three are Broadly Consistent and one is Partly Consistent. Six Additional Jurisdictions have Final Adoption Measures taken and in force or Draft Adoption Measures published.

(Recommendation 16). Twelve Participating Jurisdictions are Fully Consistent with Recommendation 16, one is Broadly Consistent, and one is Partly Consistent. Four Additional Jurisdictions have Final Adoption Measures taken and in force.

(Recommendation 17). Twelve Participating Jurisdictions are Fully Consistent with Recommendation 17, and two are Broadly Consistent. All eleven Additional Jurisdictions have Final Adoption Measures taken and in force.

(Market Participants Survey) Overall, based on the Market Participants Survey, the Recommendations have been largely implemented. The Review also identified certain trends and challenges to implementation, discussed in Section 6.3 below. Key observations in the analysis of the Market Participants Survey responses include:

- The responses of both Large Global REs and Medium and Small REs showed high levels of consistency across all ten Recommendations.
- The Large Global REs described practices that were consistent with implementation of all ten Recommendations.
- For all REs, the responses reflected implementation of the ten Recommendations; the average observed implementation for a given RE, across all Recommendations, was over 93%.

1. BACKGROUND

IOSCO's 2018 LRM Report seeks to improve LRM practices of open-ended funds/CIS[11] as part of IOSCO's mission to protect investors, ensure fair and efficient financial markets, and reduce systemic risk. The 2018 Recommendations build on IOSCO's 2013 *Principles of Liquidity Risk Management for CIS* (**2013 Liquidity Report**).[12] The 2013 Liquidity Report took into account lessons learned from the financial crisis of 2007-2010 and was designed as a guide for authorities and industry practitioners.

[11] An "open-ended CIS" is a "registered/authorised/public CIS which provides redemption rights to its investors from its assets, based on the net asset value of the CIS, on a regular periodic basis during its lifetime - in many cases on a daily basis, although this can be less frequently." LRM Report at note 2. Please note that money market funds and exchange-traded funds have been excluded from the scope of funds/CIS covered by this Review due to their unique characteristics.

[12] IOSCO, *Principles of Liquidity Risk Management for CIS*, Final Report, Report of the Board of IOSCO, March 2013, available at https://www.iosco.org/library/pubdocs/pdf/IOSCOPD405.pdf

The 2018 LRM Report was prepared to further address financial stability considerations as a result of IOSCO's engagement with the FSB in developing the January 2017 *Policy Recommendations to Address Structural Vulnerabilities from Asset Management Activities* (**2017 FSB Recommendations**).[13]

The 2018 LRM Report is targeted at Responsible Entities. In addition to its 17 recommendations to REs, the LRM Report also includes additional guidance to securities regulators to promote good liquidity management practices in funds. At the same time, IOSCO also published its *Open-ended Fund Liquidity Risk Management - Good Practices and Issues for Consideration* (**Good Practices**) which provides practical information on measures that may be taken to address liquidity risk management.[14]

In 2017, the FSB and IOSCO agreed that once implementation of the Recommendations was progressed, IOSCO would assess implementation, which the FSB would report back to the G20. When issuing the Recommendations in February 2018, IOSCO also indicated that "[f]ollowing the adoption of the recommendations and once a period of time for initial implementation has passed (e.g., two-three years), IOSCO intends to assess implementation across the relevant jurisdictions." Accordingly, IOSCO, upon recommendation from its Assessment Committee (**AC**), selected for assessment ten Recommendations in the LRM Report within three topic areas that are most directly related to the 2017 FSB Recommendations.

The ten Recommendations assessed are, as above, fund design process recommendations (Recommendations 1-4 and 7), day-to-day liquidity management recommendations (Recommendations 10, 12, and 14), and contingency planning recommendations (Recommendations 16 and 17). These ten Recommendations together with the additional guidance included in Section 1.3 of the LRM Report cover a range of initiatives during both the design phase and day-to-day operation of funds as well as contingencies so that Responsible Entities can appropriately manage liquidity. The Recommendations provide the necessary framework for the Review. Money market funds and exchange-traded funds have been excluded from the scope of funds/CIS covered by this Review due to their unique characteristics.

In addition, this comprehensive assessment exercise includes a review of how the 2018 Recommendations have been implemented in practice.[15] Further, as the IOSCO AC began to plan this Review, the world was struck by a global pandemic. In consultation with relevant FSB staff, the AC's assessment review was extended to include specific questions on how funds fared under the dynamic market conditions of March 2020.

The fourteen Participating Jurisdictions (through fifteen IOSCO member authorities) were from: Australia, Brazil, Canada, China, France, Germany, India, Ireland, Japan, Luxembourg, Spain,

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[13] FSB *Policy Recommendations to Address Structural Vulnerabilities from Asset Management Activities* available at https://www.fsb.org/wp-content/uploads/FSB-Policy-Recommendations-on-Asset-Management-Structural-Vulnerabilities.pdf

[14] IOSCO, *Open-ended Fund Liquidity Risk Management—Good Practices and issues for Consideration,* Final Report, Report of the Board of IOSCO, February 2018, available at https://www.iosco.org/library/pubdocs/pdf/IOSCOPD591.pdf?msclkid=b61f7c98c81f11ec927bb761d6f4945a

[15] See *Statement on IOSCO liquidity risk management recommendations for investment funds* (July 2019) https://www.iosco.org/news/pdf/IOSCONEWS539.pdf

Switzerland, United Kingdom and United States of America,[16] which represented over 92% of global AUM[17].

The eleven Additional Jurisdictions were: Argentina, Hong Kong, Indonesia, Italy, Korea, Mexico, The Netherlands, Saudi Arabia, Singapore, South Africa and Turkey.

The Market Participants Survey was voluntary, and individual responses remain confidential and have been used only in an anonymized and/or aggregated format. While this report does not identify the REs that responded to the Market Participants Survey, the main outcomes of the assessment are included in this report (see Section 6).

2. METHODOLOGY

2.1. Jurisdictional Review Process

The RT developed an Assessment Methodology and Jurisdictions' Survey, to facilitate the assessment of Participating and Additional Jurisdictions. The review of Participating Jurisdictions is a Level 2 assessment, meaning an assessment of whether Participating Jurisdictions have in place regulatory frameworks that are consistent with the Recommendations as of the Review Date. The Additional Jurisdictions responded to the same Jurisdictions' Survey, but the Level 1 assessment was limited to whether relevant domestic regulatory measures have been adopted into their regulatory framework. Additional Jurisdictions were not scored on consistency with the Recommendations. Rather, they were rated in terms of whether they have completed the process of adopting domestic regulatory measures. Because of the differences in rating methodology and scales, the ratings for Participating Jurisdictions and Additional Jurisdictions are not comparable. A key component of its implementation assessment was the issuance of a Market Participants Survey, which allowed the AC to gather information on how REs manage liquidity risk in light of the 2018 IOSCO LRM Recommendations. This additional data collection from Market Participants provided valuable additional information for the Review, but did not have any impact on the ratings of Participating Jurisdictions or Additional Jurisdictions.

2.2. Rating Methodology for Participating Jurisdictions

The Review was a desk-based exercise and involved an active dialogue with the Participating Jurisdictions. Following the analysis of the responses to the Jurisdictions' Survey, the RT engaged with each Participating Jurisdiction to obtain any additional clarifications on the responses received. Participating Jurisdictions were able to clarify and/or supplement their responses. Participating Jurisdictions were also given the opportunity to review and fact check the way their responses have been reflected in this report.

The Assessment Methodology included a **Rating Scale** (see Table 1) to assess the consistency of the implementation of the Recommendations by Participating Jurisdictions. Participating Jurisdictions were asked to use the Rating Scale to self-assess the consistency of their regulatory framework with the Recommendations. The RT used the Participating Jurisdiction's responses to the questions in the survey as the starting point for its own assessment. Additionally, the RT

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[16] The Ontario Securities Commission (OSC) and the Quebec Autorité des marchés financiers (AMF, Québec) provided a joint response. The US Securities and Exchange Commission (SEC) responded for the United States.

[17] Source – Bloomberg (Aug 2019)

reviewed narrative explanations and references to relevant legislation to assess the consistency of each Participating Jurisdiction's regulatory framework with the Recommendations. The assessment of Participating Jurisdictions followed IOSCO's standard rating scale for consistency reviews, applying the following criteria for assessment.

Table 1
Participating Jurisdictions Rating Scale

Fully Consistent	The jurisdiction's regulatory framework is fully consistent with the Policy Recommendation. The assessment has identified no gaps or shortcomings, or only a few gaps/shortcomings that have no material impact on the intended outcomes of the Recommendation. Criteria: Requires affirmative responses to all *Essential* questions, and satisfactory responses to the *For RT Analysis* questions.
Broadly Consistent	The jurisdiction's regulatory framework is broadly consistent with the Recommendation. The assessment has identified gaps/shortcomings that only have a minor impact on the intended outcomes of the Recommendation. Criteria: Requires affirmative responses to all *Essential* questions and broadly satisfactory responses to the *For RT Analysis* questions.
Partly Consistent	The jurisdiction's regulatory framework is partly consistent with the Recommendation. The assessment has identified gaps/shortcomings that have a significant impact on the intended outcomes of the Recommendation. Criteria: Requires affirmative responses to all *Essential* questions and partly satisfactory responses to the *For RT Analysis* questions.
Not Consistent	The jurisdiction's regulatory framework is not consistent with the Recommendation. Criteria: Inability to respond affirmatively to the *Essential* questions.
Not Applicable	The Recommendation is not applicable.

Different Participating Jurisdictions took different approaches to implementation of the Recommendations, and jurisdictions may have different approaches for different types of funds. While some Participating Jurisdictions implement regulatory standards via detailed obligations in their enabling laws, others express broad principles in legislation, and many use a combination of both principles-based and rules-based regulation. As with all IOSCO Principles, the Recommendations can be implemented by these varied approaches.

The Review Team referenced the terminology used in the Recommendations, as defined in the LRM Report, but considered the substance of jurisdictions' regulatory frameworks. Jurisdictions used the terms from the Recommendations in a variety of ways, and many regulatory regimes do not define or even use certain terms from the Recommendations, such as the term "liquidity risk management tools" (LMTs). The Review Team considered whether the jurisdiction has in practice regulatory provisions that meet the definition of the relevant term, for example LMT, as used in the Recommendations.

2.3. Rating Methodology for Additional Jurisdictions

Additional Jurisdictions responding to the Survey for the implementation review were rated based on their self-assessment. The ratings followed IOSCO's standard rating scale for adoption reviews, with a focus on the status of Adoption Measures (i.e., legislative, regulatory and/or policy measures) taken to implement the Recommendations as of the Review Date. These ratings do not reflect an assessment of the consistency of the measures with the Recommendations and are not intended to be compared to the Participating Jurisdictions ratings.

Table 2
Additional Jurisdictions Rating Scale

Final Adoption Measures taken and in force	Adoption Measure have been taken and are in force.
Final Adoption Measures published but not yet taken or in force	Adoption Measures have been finalized and approved/adopted but have not been taken or put into force.
Draft Adoption Measures published	Proposals about Adoption Measures have been made public, for example, through public consultation or legislative deliberations.
Draft Adoption Measures not published.	Jurisdictions have taken no published steps to implement the Recommendations.
Not Applicable	Adoption Measures are not needed.

While Additional Jurisdictions were invited to self-assess their adoption status, the RT's final rating differed from that self-assessment in the following situations:

- Where the Rating Scale had been misapplied and/or the basis to support the implementation was not clear (including where insufficient evidence had been provided);
- Where purported implementation clearly was not related to the Recommendations; and
- Where the scope of the implementation measures did not cover the full scope intended by the Recommendations.

2.4. EU Legislative Framework

The LRM Review assessed individual EU jurisdictions and not the EU as a whole (nor the EU legal/regulatory framework). Therefore, the approach was to assess the laws and regulations that are applicable in each jurisdiction (EU and national legislations/regulation). Relevant LRM EU legislative dispositions can take the form of Directives, Regulations and Guidelines. Members of the European Union (**EU**) are subject to the European Undertakings For Collective Investment In Transferable Securities (UCITS) Directive, as well as the European Alternative Investment Fund (AIF) Managers (AIFM) Directive, along with other related EU implementing and delegated acts and guidelines.[18]

[18] Directive (Directive 2009/65/EC) of 13 July 2009, as amended (**EU UCITS Directive**), https://eur-lex.europa.eu/legal-content/EN/TXT/HTML/?uri=CELEX:02009L0065-20210802&from=EN (as amended through 2 August 2021). (Directive 2011/61/EU) of 8 June 2011 (**EU AIFM Directive**), https://eur-lex.europa.eu/legal-content/EN/TXT/HTML/?uri=CELEX:32011L0061&from=EN. EU countries had to transpose this directive into national law by 22 July 2013. All have done so. See https://eur-lex.europa.eu/legal-content/EN/NIM/?uri=CELEX:32011L0061. Commission Directive 2007/16/EC of 19 March 2007 implementing Council Directive 85/611/EEC on the coordination of laws, regulations and administrative

When the EU legislative disposition is a Directive, each EU jurisdiction needs to transpose the provisions of the Directive in their national framework. In practice, the National Competent Authority reflects the provisions of the Directives in the respective national laws and/or regulations. The Review Team assessed the local provisions that implement the Directives, keeping in mind not all the jurisdictions transpose the Directives in the same way and some flexibility is left to Member States in specific areas.

When the EU legislative disposition is a Regulation, then the rules are immediately applicable in all EU jurisdictions (*i.e.* no need for transposition of the EU text). The Review Team assessed the applicable provisions under the EU Regulation, and other applicable national laws/regulations referred to by the jurisdiction.

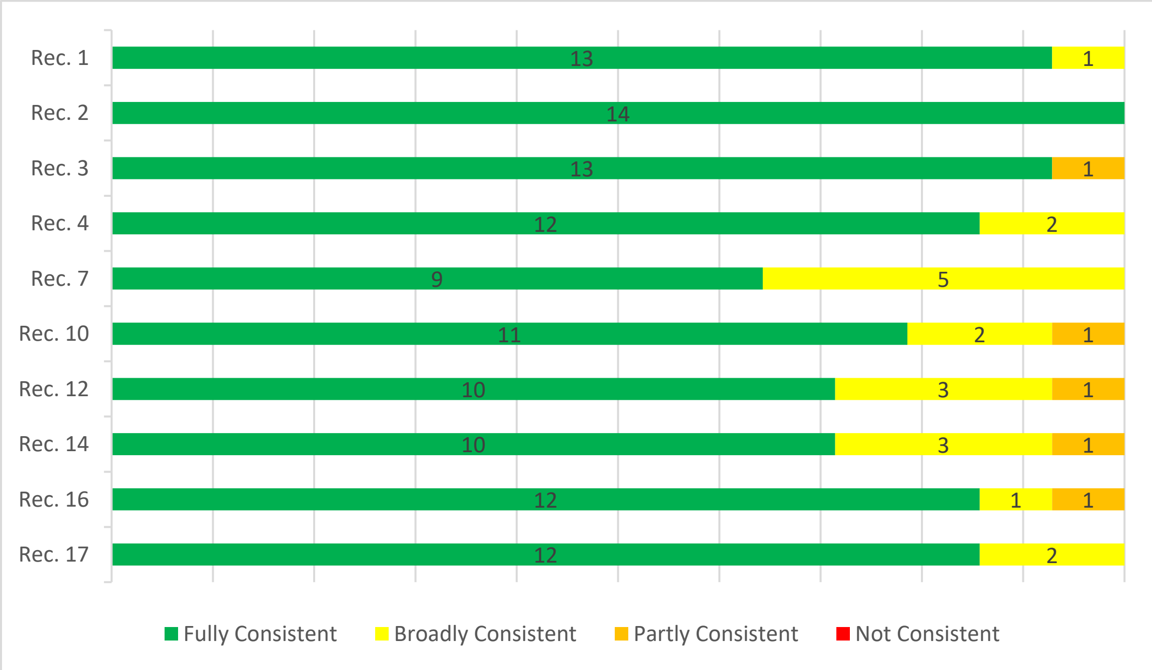
Guidelines are published the European Securities and Markets Authority (**ESMA**) and its predecessor the Committee of European Securities Regulators (**CESR**) and each member jurisdiction has to formally declare whether they will comply with the rules or not; if they do not, then they have to explain why (that is on a "comply or explain" basis). When a jurisdiction declares, for example, that it complies with ESMA Guidelines on liquidity stress testing, it means that it has incorporated them into its national legal and/or supervisory frameworks as appropriate. This can be done in different ways such as directly applying the guidelines in the national framework, incorporating them into national law, or using other binding or non-binding instruments to apply them. Given that the ESMA Guidelines cover part of the LRM Recommendations, the Review Team first assessed which parts of the Recommendations are addressed by the ESMA Guidelines. The Review Team then checked whether the participating jurisdiction formally declared to ESMA its compliance with such Guidelines. In addition, the Review Team ascertained the enforceability of the Guidelines either with examples of how the authority has been able to use the Guidelines to induce change in the funds to meet the respective Recommendations, or by confirming reference to the Guidelines in their laws.

provisions relating to undertakings for collective investment in transferable securities (UCITS) as regards the clarification of certain definitions. Commission Directive 2010/43/EU of 1 July 2010 implementing Directive 2009/65/EC of the European Parliament and of the Council as regards organisational requirements, conflicts of interest, conduct of business, risk management and content of the agreement between a depositary and a management company. Commission delegated regulation (EU) No 231/2013 of 19 December 2012 supplementing Directive 2011/61/EU of the European Parliament and of the Council with regard to exemptions, general operating conditions, depositaries, leverage, transparency and supervision.

3. OBSERVATIONS ON PARTICIPATING JURISDICTIONS

Box 3 summarizes the jurisdictional ratings for Participating Jurisdictions on consistency of regulatory frameworks with the Recommendations.

BOX 3: Participating Jurisdictions Ratings (by Recommendation)



Seven of the fourteen Participating Jurisdictions are **Fully Consistent** with all ten Recommendations (China, Germany, Japan, Luxembourg, Spain, United Kingdom, United States). Two Participating Jurisdictions received a rating of Fully Consistent for nine of the assessed Recommendations (France and Ireland). Three Participating Jurisdictions received Fully Consistent ratings for six or seven of the Recommendations (Brazil, Canada, and Switzerland). India received Fully Consistent on six of the Recommendations, and Australia received Fully Consistent on three of the Recommendations. All fourteen of the Participating Jurisdictions were Fully Consistent with at least some of the ten Recommendations, and all fourteen Participating Jurisdictions were at least **Partly Consistent** with all ten Recommendations. See also Box 1 above. The following subsections present more detailed discussions of the assessment by Recommendation, by jurisdiction and by rating.

3.1. Design Recommendations (Recommendations 1, 2, 3, 4, and 7)

Recommendation 1:
The responsible entity should draw up an effective liquidity risk management process, compliant with local jurisdictional liquidity requirements.

Rating	Jurisdictions	
Fully Consistent	Brazil	Japan
	Canada	Luxembourg
	China	Spain
	France	Switzerland

	Germany India Ireland United Kingdom United States
Broadly Consistent	Australia
Partly Consistent	
Not Consistent	

In order to be rated Fully Consistent the RT analysed whether the regulatory framework clearly and adequately addressed the essential element of Recommendation 1:

- Does the regulatory framework include requirements regarding a liquidity risk management process, including the applicability of implementing liquidity requirements in the design phase of a new CIS?

- Does the regulatory framework require a responsible entity to consider the liquidity of the types of instruments in which it will invest, including:

    - how a responsible entity is expected to manage its assets consistent with the entity's ability to comply with its redemption obligations and other liabilities (e.g., considerations at the level of the same asset class, target investor base, considerations for varied market conditions); and

    - if there are distinctions in the regulatory framework between requirements at creation and requirements over the lifecycle of the CIS?

The RT looked for requirements relating to the existence of an effective process in a variety of ways, including governance and structure requirements for CIS, as well as accountability for continued oversight of these essential design requirements through monitoring, surveillance, enforcement, and other means.

Fully consistent regulatory frameworks under Recommendation 1 were achieved in different ways. The **EU** regulatory framework generally provides for an effective LRM process, including implementing liquidity requirements in the design phase of a new CIS, and requiring REs to consider the liquidity of the types of instruments in which they will invest. There were a variety of approaches to implementing this framework in individual EU jurisdictions, including:

- For example, in the case of **France**, it adopted much of the EU regulatory framework for LRM, but its regulatory framework did not require a separate freestanding governance architecture dedicated only to monitoring liquidity risks. Its regulatory framework ensures that the LRM is integrated into a broader risk management framework in a manner that complies with Recommendation 1.[19]

- Similarly, **Ireland** issued a notice stating that it expected all of its participants to comply with ESMA guidelines on LRM and other structures. It thus, through exercise of its supervisory powers, created with this announcement a compliance obligation as it prepares to adopt further legislation at the domestic level to implement the EU regulatory framework in the future.

[19] 321-77 AMF Regulatory Guide.

- **Luxembourg**'s Commission de Surveillance du Secteur Financier (**CSSF**) issued a Circular implementing all the Recommendations in the LRM Report.[20] This Circular took effect on 20 December 2019 and is applicable to all OEFs in Luxembourg. Luxembourg also expressly adopted key ESMA and CESR guidance in its regulatory framework as well as, the EU UCITS Directive and the EU AIFM Directive.[21]

The RT determined that **Australia**'s regulatory framework was Broadly Consistent with Recommendation 1. It was not Fully Consistent with the second requirement of Recommendation 1. ASIC's original survey response states plainly that "there is no direct obligation for REs to manage their assets consistently with members' redemption rights or other liabilities of the scheme." Its regulatory framework, which is principles based rather than prescriptive does, however, provide examples of "liquidity risk treatments" that a RE should put in place.[22] The ASIC guidance does not meet the second requirement for Recommendation 1 above because it does not *at the design stage* require consideration of the liquidity of the instruments and how it will manage assets consistent with obligations and liabilities.[23]

Recommendation 2:
The responsible entity should set appropriate liquidity thresholds which are proportionate to the redemption obligations and liabilities of the CIS

Rating	Jurisdictions	
Fully Consistent	Australia Brazil Canada China France Germany India	Ireland Japan Luxembourg Spain Switzerland United Kingdom United States
Broadly Consistent		
Partly Consistent		
Not Consistent		

In order to be rated Fully Consistent the RT analysed whether the regulatory framework clearly and adequately addressed the essential element of Recommendation 2:

[20] See Circular CSSF 19/733 (effective 20 December 2019).

[21] Luxembourg has chosen to adopt these expressly in its national law in its Law of 17 December 2010 and the Law of 12 July 2013, respectively.

[22] These include "appropriate internal thresholds for liquidity, which are proportionate to the redemption obligations and ongoing commitments," "tools to identify an emerging liquidity shortage before it occurs," "ongoing assessments of the liquidity profile of the assets and liabilities held by the schemes to ensure they will be able to meet investor expectations about redemptions and other ongoing commitments," and "regular assessments of liquidity in different scenarios, including stress testing or scenario analysis." Regulatory Guide 259 (**RG259**), item 164.

[23] The RG259 on page 46 gives an example of the establishment of an LRM risk process, and the options under this example include some facts that would even take place at the design stage. But RG259 does not require the considerations embedded at the exemplar steps outlined on page 46 to be given at the design stage, saying only that Responsible Entities "can treat liquidity risk by establishing and implementing" these features.

- Does the regulatory framework provide that the RE set appropriate internal definitions and thresholds for the CIS's liquidity, which are in line with the principle of fair treatment of investors and the CIS's investment strategy?

In this regard, the analysis also reviewed under Recommendation 2 whether the regulatory framework has a description of the items a RE is to consider in setting the appropriate internal definitions and thresholds for the CIS's liquidity. This includes the redemption obligation of the CIS, the type of CIS, and the conditions under which the thresholds must be set (such as dealing frequency and margin calls from derivative counterparties). It should be noted that these requirements of items for consideration are specific while the language of the regulatory framework varies among jurisdictions.

To supplement the review process, the RT also looked for items showing that the regulatory framework envisages an alert mechanism on liquidity, considering the type and strategy of CIS and intended to send a signal to the RE for further analysis and appropriate measures.

Participating Jurisdictions rated as Fully Consistent provide for the relevant elements of Recommendation 2 in laws, regulations or mandatory guidance, which sets out the regulator's interpretation or expectation under the laws for REs.

Australia has the relevant provisions mainly in the Corporations Act 2001[24] and two Regulatory Guides.[25] For example, one Regulatory Guide[26] refers to liquidity risk treatment, including setting appropriate internal liquidity thresholds proportionate to the redemption obligations and ongoing commitments of the schemes. It also references conducting ongoing assessments of the liquidity profile of the assets and liabilities held by the schemes to ensure they will be able to meet investor expectations about redemptions in a way that is compatible with the scheme's liquidity profile, investment strategy and portfolio composition.

Switzerland takes a combined rules-based and principles-based approach, and providing specific requirements for REs to set liquidity thresholds taking into account the relevant factors in its financial institutions ordinance.[27] In this regard, the Swiss regulatory framework[28] requires a RE to take into account and consider the type, volume and complexity of its business activities and the collective assets it manages when setting up its internal guidelines and the organisation of its risk management, including the management of liquidity risk. It is also required that appropriate internal liquidity thresholds must be defined for each fund, depending in particular on the investments, the investment policy, the risk diversification, the investor base and the redemption frequency.

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24 See Section 912A and Section 601FC: Federal Register of Legislation – Australian Government at https://www.legislation.gov.au/Series/C2004A00818

25 (RG) 134 at Regulatory Guide RG 134 Funds management: Constitutions (asic.gov.au). https://asic.gov.au/regulatory-resources/find-a-document/regulatory-guides/rg-134-funds-management-constitutions/ and RG259 at https://asic.gov.au/regulatory-resources/find-a-document/regulatory-guides/rg-259-risk-management-systems-of-responsible-entities/

26 RG259.164

27 https://www.fedlex.admin.ch/eli/cc/2019/763/en

28 Art. 11 para 4 and Art. 18 of the FINMA Financial Institutions Ordinance (FinIO-FINMA), https://www.fedlex.admin.ch/eli/cc/2020/922/de

All of the **EU Participating Jurisdictions** are assessed as Fully Consistent with Recommendation 2.[29] The UCITS Directive requires member states to set out principles ensuring that funds act honestly and fairly in conducting business activities in the best interests of the UCITS it manages and the integrity of the market.[30] The UCITS Directive specifies types of assets in which UCTIS are allowed to invest, and provides for specific investment limits aiming to safeguard investor interests and ensure adequate liquidity of investments. The AIFM Regulation requires REs to implement liquidity risk limits, taking into account the strategies and assets employed in respect of each AIF it manages, and aligned with the risk profile of the AIF as disclosed to investors.[31] The investment strategy, liquidity profile and redemption policy are considered aligned when investors have the ability to redeem their investment in a manner consistent with the fair treatment of all AIF investors and in accordance with the AIF's redemption policy and its obligations.[32] EU Participating Jurisdictions transposed the relevant Directives and some jurisdictions set additional rules that align more closely with the IOSCO 2018 Recommendation. For example, **Luxembourg** has implemented a regulatory framework fully in line with the IOSCO 2018 Recommendations.[33]

Many jurisdictions also set a general rule on liquidity limits or thresholds considering a number of factors and further set specific requirements on liquid or illiquid assets. For example:

- In the **US**, the SEC's Liquidity Rule[34] requires, among other things, that certain REs determine a highly liquid investment minimum, which is the percentage of net assets that the fund invests in highly liquid investments[35] considering the investment strategy, liquidity of portfolio investments, cash flow projections, holdings of cash, cash equivalents and other factors. Additionally, in the US, funds are subject to a 15% limit on illiquid investments. Accordingly, funds are prohibited from purchasing additional illiquid investment if, immediately after the acquisition, the fund would have invested in more than 15% of its net assets in illiquid investments that are assets.

- **Canada** takes a similar approach by requiring appropriate internal limits for the RE's liquidity needs in line with its investment strategies and redemption obligation, while setting further limits on holding illiquid assets.[36]

- In **China** the regulatory framework requires a "sound and effective liquidity risk indicator warning and monitoring system for different types of open-ended funds" considering its risk

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[29] EU laws relevant to this Recommendation are mainly provided in: UCITS Directive, AIFMD Directive, Commission Directive 2007/16, Commission Directive 2010/43/EU and Commission delegated Regulation No 231/2013.

[30] Article 14(1)(a)

[31] See Article 44.

[32] See Article 49(1).

[33] See Circular CSSF 19/733.

[34] See Rule 22e-4: Investment Company Liquidity Risk Management Programs, Investment Company Act Release No. 32315 (Oct. 13, 2016), https://www.sec.gov/rules/final/2016/33-10233.pdf

[35] This is defined as "cash or investments that are reasonably expected to be converted into cash without significantly changing the market value of the investment."

[36] CSA Staff Notice 81-333, *Guidance on Effective Liquidity Risk Management for Investment Funds*, https://www.osc.ca/sites/default/files/2021-02/csa_20200918_81-333_guidance-on-effective-liquidity-risk-management-for-investment-funds.pdf. See especially Article 4.

management level and market conditions.[37] In addition to this, Chinese law requires a specific threshold requirement for REs to assess and measure the realizable value of the assets that are convertible into cash within seven working days in fund portfolio assets, and REs must ensure that the net redemption requests confirmed each day do not exceed the realizable value of the assets that are convertible into cash within seven working days.

In **Japan,** the self-regulatory organization's oversight requires REs to categorize portfolio assets into four categories based on the level of liquidity. REs must also set the maximum holding threshold for the lowest liquidity category and the minimum holding threshold for the highest liquidity category. If such thresholds are exceeded, REs will conduct further analysis and take appropriate measures. Factors to be considered include the size of the fund, the investment strategy, redemption obligation, market conditions and their impact on liquidity.[38]

Recommendation 3:
The responsible entity should carefully determine a suitable dealing frequency for units in the CIS.

Rating	Jurisdictions	
Fully Consistent	Brazil Canada China France Germany India Ireland	Japan Luxembourg Spain Switzerland United Kingdom United States
Broadly Consistent		
Partly Consistent	Australia	
Not Consistent		

Recommendation 3 provides fairly specific guidance on setting dealing frequency for units in a CIS, including considerations and requirements that should be taken into account. In order to be rated Fully Consistent the RT analysed whether the regulatory framework clearly and adequately addressed the essential elements of Recommendation 3:

- Does the regulatory framework specify dealing frequency for units?
- Does the regulatory framework require consideration as to whether a CIS should be open-ended (e.g., consideration of the CIS structure, target investor base, investment objectives and strategies, or the expected liquidity of the underlying assets)?
- Does the regulatory framework provide that the responsible entity demonstrate the consistency of the dealing frequency for units in the CIS, with its investment objectives and its expected liabilities?

37 Provisions on the Administration of Liquidity Risk of Publicly Offered Open-End Securities Investment Funds, http://lawinfochina.com/display.aspx?id=23985&lib=law&EncodingName=big5. See Article 7.

38 See JITA Rule on Management of Investment Trust, Article 2-4.

A Broadly Consistent response would have only minor gaps and shortcomings in response to the establishment of the dealing frequency and/or cover at least half of the considerations for consistency of dealing frequency and considerations for being open-ended.

As the Participating Jurisdictions' responses demonstrate, there are many different ways to create and enforce this requirement, which must be tailored to the CIS. Different jurisdictions adopted different approaches, with many delegating to REs the final determination of the frequency, to allow for the variety of different consistency metrics necessary for different types of CIS with different investment objectives and liabilities.

In the case of **Brazil**, the regulatory framework ensures that the RE determines a dealing frequency at the design stage that is compatible with the assets and obligations.[39] Through both some detailed requirements for REs as well as ongoing principles-based supervision and oversight to secure compliance, Brazil is Fully Consistent.

Japan is Fully Consistent through newly-enacted regulation and the relevant rules from the Investment Trusts Association (**JITA**).[40] JITA is the sole authorized association for registered investment management businesses, entities which are generally used to operate open-ended funds. JITA is authorized by the JFSA to conduct activities to promote good market practices, which includes giving instructions to its members.[41] These instructions are enforceable.[42] JFSA has highlighted in its announcement in June 2020 that firms it regulates must comply with the JITA regulations as recently amended, including the establishment of LRM programs with certain features.[43] The JITA rules were adopted in final form in June 2020.[44] Recommendation 3 requires that certain factors be expressly considered at the design phase for consistency with the dealing

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39 Brazil does this though article 91 of its Instruction CVM 555. This article 95 provides that liquidity be compatible with the deadlines set for redemption. Brazilian authorities have ongoing oversight and supervision of these choices during the design and operation phase.

40 See Japan follow-up response, Annex 1, Article 2-4 ("Development of Liquidity Risk Management System"), documenting JITA rule restrictions on types of funds in various accounts (structure), liquidity monitoring, expected liquidity of assets (general evaluation at Par 1(i)(a)); and investment strategies and objectives (through the creation and monitoring liquidity tranches, with ongoing monitoring on whether the characteristics of the investment products affect the liquidity risk, Par. (1)(ii)(a)-(b)). The new set of rules involve adding a new item in the law (Article 130(1)(8-3) of the Cabinet Office Ordinance below) and a number of updates to JITA rules. Cabinet Office Ordinance relating to Financial Instruments Business Operators, Article 130(1)(8-3) provides to the effect that, in connection with the liquidity risk management of the securities and other assets held, Financial Instruments Business Operators shall not manage assets without implementing reasonable measures to prevent failure to respond to redemption requests by unitholders.

41 Article 78(2) of Japan's Financial Instruments and Exchange Act (FIEA). Although technically it is not mandatory to be a member of JITA, as practical matter nearly all relevant firms are. Moreover, JITA and the regulatory structure operate in such a way so subject to non-members to JITA rules, such as requiring JFSA to reject a registration application from a firm that does not have JITA-equivalent rules.

42 JITA can, in its role as a self-regulatory association, take disciplinary actions (including monetary penalties, suspension, or expulsion of membership).

43 JFSA Response to Public Comments dated June 4, 2020, relating to Amendment to Financial Instruments Business (FIB) Cabinet Office Ordinance, etc. See https://www.fsa.go.jp/news/r1/shouken/20200604.html (in Japanese only).

44 The provisions of Article 2-4 entered into force on 1 January 2022, with provision for time for asset management companies to formulate reasonable implementation plans to comply. In any event, Japanese Responsible Entities are on notice, from the time of the JFSA's June 2020 pronouncement, that they are expected to comply with the JITA rules on LRM.

frequency, at the design phase. JITA's rules as amended are consistent with Recommendation 3.[45]

Responses from **European** jurisdictions are Fully Consistent as they have implemented the particulars of EU regulations and guidance on dealing frequency on a national level, ensuring that their regulatory framework requires the setting of appropriate dealing frequencies for all funds, including both AIFMD and UCITS. Similarly, the **United States** has regulations which requires consideration of all relevant factors at the design stage.[46]

India is Fully Consistent. SEBI has established in regulation and guidance general requirements for the expected liquidity of assets when deciding whether a fund should be open-ended.[47] SEBI then issued subsequent guidance providing sufficient detail and guidance on some of the mandatory factors for consideration.[48]

Australia is Partly Consistent. It does not specify a frequency for dealing as part of the regulatory framework. In response to the survey, it reported that it does not specify a frequency for dealing.[49] However, it has general principles and some guidance which might well lead many REs in practice to consider and demonstrate consistency of the dealing frequency for units in the CIS, set by the RE, with both investment objectives and expected liabilities. However, its principles and regulatory guidance do not expressly steer REs to consider consistency with both investment objectives and expected liabilities in every case at the design stage. Under Australia's principles-based approach, it is an option for the RE to determine the dealing frequency, consistent with the Target Market Determination (**TMD**) for that scheme. This approach is only Partly Consistent because it does not mandate that the fund set a dealing frequency with appropriate consistency tests at the design phase. The Australian regulatory framework does at the operational phase address at least one of these consistency tests,[50] but this cannot be viewed as Broadly Consistent because it is not done at the design stage.[51]

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45 The new JITA rules, help to ensure full consistency. While the FIEA does provide in Article 130(1)(8-3) a reference to firms considering "reasonable measures" with respect to dealing frequencies, Article 130(1)(8-3) does not expressly detail the considerations which Recommendation 3 seeks for ensuring consistency of the dealing frequency with fund's structure and business model.

46 17 C.F.R. Sec. 270.22e-4 ("Liquidity risk management programs"), available at eCFR :: 17 CFR 270.22e-4 -- Liquidity risk management programs. See, e.g., SEC Rule 22e-4(b)(1)(i)(A).

47 See, e.g., section B of https://www.sebi.gov.in/legal/circulars/nov-2010/circular-for-mutual-funds_14073.html,

48 SEBI recently issued a Circular on Risk Management Framework for Mutual Funds (Sept. 27, 2021), which ensures that express consideration is given to factors bearing on whether a fund should be open-ended (such as the structure of the fund; the appropriateness of the dealing frequency in light of the target investor base; the investment strategy and objectives; and the expected liquidity of the underlying assets). This recent Circular might address the observed gap in future assessments. https://www.sebi.gov.in/legal/circulars/sep-2021/risk-management-framework-rmf-for-mutual-funds_52943.html at subsection 2.3.

49 RG 274 in particular.

50 It provides in the TMD process for REs to track and update for expected liabilities. This information can in practice be paired with dealing frequencies in the operational phase. Moreover, the prospectus and disclosure documents for CIS are likely to contain information on dealing frequency when one is set.

51 The real-world implications of this somewhat technical gap may not, as Australian regulators have observed, lead to any practical difference in outcome. We acknowledge that this may be the case, but Recommendation 3 has technical requirements for certain factors to be considered at the design stage.

Recommendation 4:
The responsible entity should ensure that the CIS' dealing (subscription and redemption) arrangements are appropriate for its investment strategy and underlying assets throughout the entire product life cycle, starting at the product design phase.

Rating	Jurisdictions	
Fully Consistent	Brazil Canada China France Germany Ireland	Japan Luxembourg Spain Switzerland United Kingdom United States
Broadly Consistent	Australia	India
Partly Consistent		
Not Consistent		

In order to be rated Fully Consistent the RT analysed whether the regulatory framework clearly and adequately addressed the essential elements of Recommendation 4:

- Does the regulatory framework require the responsible entity to set CIS dealing arrangements (subscription and redemption) that will be appropriate throughout the entire product life cycle with regards to its investment strategy and underlying assets?

- Does the regulatory framework require the responsible entity to conduct a documented assessment of the likely liquidity risks facing an open-ended CIS as part of the initial design process?

Participating Jurisdictions were generally able to respond positively and completely to these questions.

For example, **Brazil's** regulations[52] require fund operators to ensure the dealing frequency is appropriate with the investment objectives and that the fund's portfolio liquidity is compatible with the deadlines provided in the regulation for payment of redemption requests and the fulfilment of the fund's obligations, including at the product design phase. This also includes the requirement for the RE to conduct a written assessment to allow for the permanent monitoring, measurement and adjustment of the risks, including liquidity risk, inherent to each of the securities portfolios.

In **Canada**, guidance[53] foresees six principles and practical implementation strategies for each principle, indicating that a proper LRM process should begin with the design phase of products to ensure alignment of redemption terms and investment strategy. From there the following is considered: the fund's lifecycle, recognizing the fund's liquidity risk characteristics may change

52 CVM Instruction 555/14 and CVM Instruction No. 558/15 available, respectively, at http://conteudo.cvm.gov.br/export/sites/cvm/legislacao/instrucoes/anexos/500/inst555.pdf and http://conteudo.cvm.gov.br/export/sites/cvm/legislacao/instrucoes/anexos/500/inst558.pdf

53 See the Canadian Securities Administrators (CSA) Staff Notice 81-333, *Guidance on Effective Liquidity Risk Management for Investment Funds:* https://www.osc.ca/sites/default/files/2021-02/csa_20200918_81-333_guidance-on-effective-liquidity-risk-management-for-investment-funds.pdf

over time, and noting LRM needs to remain effective in varied market conditions. The Guidance also refers to the documented policies and procedures that address the fund's key liquidity risks.

The regulatory framework in **China** requires[54] that the fund management institution shall, at the preliminary design stage of the fund product, comprehensively assess and analyze such factors as: the liquidity of the investment subject matter, investment strategies, investment limit, sales channels, the types and risk preferences of potential investors, and investor structure, and prudentially decide whether to conduct open-end operation. Also, the requirements establish that where the fund management institution plans to conduct an open-ended operation, the liquidity of portfolio assets shall match the subscription and redemption arrangement agreed upon in the fund contract; the investment strategy shall be able to support investors' redemption requests under different market circumstances; and the arrangements in such aspects as the fund investor structure and fund valuation and pricing shall enable investors to receive equitable treatment. Finally, the regulation also requires the fund management institution to have a fund liquidity risk assessment report including at the moment the fund registration application is filed before the China Securities Regulatory Commission (**CSRC**). This document is maintained and updated through the lifecycle of the product.

As another example, in the **US** SEC rules[55] require funds to establish a LRM program. Among other things, a fund is required to assess, manage and periodically review its liquidity risk, including whether its investment strategy and the liquidity of the portfolio investments during both normal and stressed conditions is appropriate for the open-ended fund structure. This includes the design phase. This LRM program is subject to internal approval by the fund's board from fund launch and reviewed on an ongoing basis.

The RT assessed **Australia** and **India** to be Broadly Consistent with Recommendation 4.

In the case of **Australia**, a number of obligations across the framework apply to require REs to manage their CIS dealing arrangements across the product lifecycle. These include general licensing requirements (see s912A(1)) which apply from the granting of an Australian Financial Services license and include the requirement to maintain adequate risk management systems (including for liquidity risk). ASIC guidance[56] sets out that REs can manage liquidity risk by ensuring the frequency of dealing in units in the scheme and investor redemption rights are compatible with the scheme's liquidity profile, investment strategy and portfolio composition. More broadly, Australia has a principles-based product governance regime via the product design and distribution obligations (DDO)[57]. To meet their DDO obligations, issuers are required to

[54] See: article 12 of the Provisions on the Administration of Liquidity Risk of Publicly Offered Open-end Securities Investment Funds: http://lawinfochina.com/display.aspx?id=23985&lib=law&EncodingName=big5

[55] Rule 22e-4.

[56] Regulatory Guide (RG) 259 at https://asic.gov.au/regulatory-resources/find-a-document/regulatory-guides/rg-259-risk-management-systems-of-responsible-entities/

[57] RG 274 on Product design and distribution obligations (DDO), https://asic.gov.au/regulatory-resources/find-a-document/regulatory-guides/rg-274-product-design-and-distribution-obligations/ DDO is intended to increase the responsibility on issuers to consider consumer outcomes in product design and distribution, through obligations applied across the product lifecycle from product design through to distribution and monitoring outcomes. The DDO were originally scheduled to commence on 5 April 2021. Due to the COVID-19 pandemic, ASIC provided a temporary exemption from the obligations for six months. Issuers and distributors of financial products must comply with the DDO obligations from 5 October 2021 (i.e., within the cut-off date of the AC's Thematic Review).

prepare a Target Market Determination (TMD)[58] before they distribute their products, which sets out the class of consumers (target market) for whom the product is likely to be appropriate, having regard to their likely objectives, financial situations and needs. ASIC has represented that liquidity of a product is likely to be a relevant factor in determining whether the product is likely to be appropriate for the class of consumers identified in the TMD and issuers should consider their CIS dealing arrangement across the product lifecycle in meeting their DDO obligations. However, there is no explicit requirement under the DDO to assess the likely liquidity risks facing an open-ended CIS. This represents a minor gap relating to the requirement on documented assessment of the likely liquidity risks facing an open-ended CIS as part of the initial design process.

In the case of **India**, the regulations[59] require funds to have a Scheme Information Document (SID) which is filed with SEBI before introduction of any new mutual fund scheme. The SID indicates the (liquidity) risk level, (liquidity) risk appetite, and the (liquidity) risk profile of the fund, as well as the fund's investment strategies. This is disclosed together with a Risk-o-meter (which also measures liquidity risk of the schemes) that is evaluated on a periodic basis. Although, the indication of the risk level of the fund is not equal to setting a dealing arrangement or putting such arrangements in line with the fund's investment strategy and the underlying assets, the 2021 Circular on Risk Management Framework for Mutual Funds requires schemes that are open-ended in nature to have liquidity risk management measures in place. Among other things, it requires that liquidity risk be modelled at the level of each scheme and consider the expected liquidity of the underlying assets and liabilities (including subscription and redemption). REs are also required to monitor and manage effectively any asset liability mis-match within a defined limit during the product life cycle. Moreover, the 2021 Circular requires that the systematic classification and evaluation of liquidity risks should be initiated by evaluating and disclosing the liquidity risk associated with schemes/products in the Scheme Information Document (SID), which is filed with SEBI before introduction of any new mutual fund scheme. However, the requirement on a documented assessment of liquidity risk at the initial design phase is not explicitly mentioned in the regulations.

Recommendation 7:
The responsible entity should ensure that liquidity risk and its liquidity risk management process are effectively disclosed to investors and prospective investors.

Rating	Jurisdictions	
Fully Consistent	Canada China Germany Japan Luxembourg	Spain Switzerland United Kingdom United States
Broadly Consistent	Australia Brazil France	India Ireland
Partly Consistent		
Not Consistent		

58 https://asic.gov.au/regulatory-resources/find-a-document/regulatory-guides/rg-274-product-design-and-distribution-obligations/

59 See SEBI (Mutual Funds) Regulations. https://www.sebi.gov.in/legal/regulations/mar-2020/securities-and-exchange-board-of-india-mutual-funds-regulations-1996-last-amended-on-march-06-2020-_41350.html

In order to be rated Fully Consistent the RT analysed whether the regulatory framework clearly and adequately addressed the essential elements of Recommendation 7:

- Does the regulatory framework provide for disclosures on liquidity risk to investors and prospective investors in the offering documents, including the summary of process for mitigating risk, the circumstances that such liquidity risk must be disclosed, its significance and potential impacts on CIS and investors, and any tools or measures that might impact redemption rights (including an explanation on how they operate, their effect on CIS liquidity/investor redemption rights, and when they might be applied)?

- Does the regulatory framework provide for the disclosure of basic liquidity information (for example, the dealing frequency of the CIS and how to buy/sell units) to investors?

As part of this assessment, the RT also considered whether the regulatory framework provides for disclosure on actual or projected portfolio/asset classes which the CIS is currently or expected to invest in; and on the general approach the CIS will take in dealing with situations where it is under liquidity pressure from a heightened level of net redemption request.

All Participating Jurisdictions rated as Fully Consistent have explicit regulatory requirements on disclosure of the abovementioned key elements with respect to liquidity risk and related information. Some jurisdictions have issued dedicated regulatory guidance covering various aspects on LRM and corresponding disclosure requirements.

In addition to the relevant requirements under the EU laws, some Participating Jurisdictions which are members of the EU have taken extra steps to incorporate more granular disclosure requirements relating to liquidity risk into their own regulatory framework. One example is **Germany**. On top of the requirements under the EU, Germany has included more granular and specific requirements on disclosures of liquidity management such as requiring descriptions of the redemption rights under normal and extraordinary circumstances.[60]

The regulatory frameworks of the five jurisdictions rated Broadly Consistent with Recommendation 7 (**Australia**, **Brazil, France, India, Ireland**), clearly require disclosure relating to liquidity risk. However, there were minor gaps on some of the relevant elements such as lack of clear disclosure requirements on summary of process for mitigating liquidity risk (for France, India and Ireland), projected/actual asset portfolio (for Australia) or on the fund's approach in dealing with liquidity pressure due to heightened redemptions (for Brazil).

3.2. Day-to-day Liquidity Practices (Recommendations 10, 12, and 14)

Recommendation 10:
The responsible entity should regularly assess the liquidity of the assets held in the portfolio

Rating	Jurisdictions	
Fully Consistent	Brazil	Japan
	China	Luxembourg
	France	Spain
	Germany	United Kingdom

60 See Section 165 para. 2 no. 22 of the German Capital Investment Code (Kapitalanlagegesetzbuch – KAGB).

	India Ireland	United States
Broadly Consistent	Australia	Canada
Partly Consistent	Switzerland	
Not Consistent		

In order to be rated Fully Consistent the RT analysed whether the regulatory framework clearly and adequately addressed the essential elements of Recommendation 10:

- Does the regulatory framework provide that REs regularly measure, monitor, and manage the CIS's liquidity?

- Describe (i) whether the regulatory framework provides that REs ensure compliance with defined liquidity limits and the CIS's redemption policy, (ii) whether these are set by national regulation, set out in the liquidity risk management process, or detailed in the CIS's documentation or other internal thresholds; and (iii) whether the framework provides that REs take into account the interconnection of liquidity risk with other risk factors such as market risk or reputational risk.

The majority of Participating Jurisdictions appear to have regulatory frameworks which require REs have frameworks allowing them to measure, monitor and manage CIS' liquidity on a regular basis. While the approach of regulatory requirements may vary, the majority also require REs to take into account a range of issues with important implications for CIS liquidity (obligations to creditors, counterparties and other third parties; time to liquidate assets; price at which liquidation could be effected, and; financial settlement lags). For EU jurisdictions, UCITS are subject to specific requirements on eligible assets to ensure their ongoing liquidity and the alignment of their liquidity profile with their redemption frequency.

While two Participating Jurisdictions (**Australia and Canada**) also include factors to be considered when assessing liquidity in their regulatory frameworks, there is no legal requirement for them to do so. In Australia, REs are required to have adequate risk management systems and act in the best interests of members.[61] Australian regulatory guidance explains its expectations on how firms should meet their obligations under the relevant legislation but it is not legally enforceable. In addition, the level of detail is not entirely adequate to address all the key aspects of Recommendation 10. Similarly, even though Canadian Staff Guidance "is not legally enforceable" for the most part, it reflects binding enforceable rules. Nonetheless, not all relevant aspects are covered. This is why they are therefore assessed as Broadly Consistent.

In a third Participating Jurisdiction (**Switzerland**) there is an overarching requirement for managers or funds to comply with their legal responsibilities in relation to funds. It is also required that REs review their liquidity and other key risks regularly and ensure that all relevant risks – market liquidity and counterparty – are captured. However, this is not accompanied by the level of detailed guidance on the liquidity assessment provided by recommendation 10 and so Switzerland is assessed as Partly Consistent. Switzerland is in the process of adopting new provisions regarding the liquidity risk management of CIS taking into account international standards such as IOSCO's 2018 Recommendations.

[61] s912A(1)(h) and s601FC Corporations Act 2001.

Recommendation 12:
The liquidity risk management process should facilitate the ability of the responsible entity to identify an emerging liquidity shortage before it occurs.

Rating	Jurisdictions	
Fully Consistent	Brazil China France Germany Ireland	Japan Luxembourg Spain United Kingdom United States
Broadly Consistent	Australia Canada	India
Partly Consistent	Switzerland	
Not Consistent		

In order to be rated Fully Consistent the RT analysed whether the regulatory framework clearly and adequately addressed the essential elements of Recommendation 12:

- Does the regulatory framework provide for a process that aims to identify CIS liquidity pressures by the RE before they crystallise?

- Does the regulatory framework provide for the fair treatment of investors and consideration of investors' best interests in managing a CIS' liquidity risk?

To be fully consistent with this Recommendation, the RT considered whether national frameworks require REs to incorporate in their LRM processes the identification of liquidity pressures before they crystalize, and to then take appropriate action, respecting the principle of fair treatment of investors and maintaining the alignment between the CIS' investment strategy and its liquidity profile.

The ten Fully Consistent jurisdictions have been assessed as requiring REs to have robust processes to identify emerging liquidity pressure. Fair treatment of investors and acting in their best interests as well as ensuring the alignment of the investment strategy with the liquidity profile at all times are general and overarching obligations attached to CIS management. On-going liquidity risk monitoring in different market conditions, including stress testing, is conducted. All Participating **EU** Jurisdictions[62] comply with ESMA's *Guidelines on liquidity stress-testing*, which provide clear indications on how these stress-tests shall be conducted. In the **UK**, it is required to establish, implement and maintain an adequate and documented risk management policy for identifying the risks to which open-ended funds are or might be exposed, including liquidity risk. Specific requirements on liquidity stress-testing only apply to AIFs. In the **US** framework, REs are required to assess the overall liquidity of portfolios based on liquidity risk factors, which have to be reviewed at least monthly (or more frequently if market, trading and investment specific developments are reasonably expected to materially affect one or more of its investments' classification). Funds are also required to hold both a minimum percentage of highly liquid investments (i.e., that can be converted to cash within three business days) and a maximum of 15% illiquid assets. Any shortfalls in highly liquid investment minimums for seven calendar

[62] Which is applicable to France, Germany, Ireland, Luxembourg and Spain.

days or more must be reported to the SEC. In **Brazil**, while the regulatory framework contains high level rules, more detailed requirements are set out in circulars and by ANBIMA (Fund Management Code) which are directly enforceable.

India is rated Broadly Consistent with Recommendation 12 since the framework explicitly requires management companies to establish mechanisms to make use of early warning indicators and to incorporate forward-looking asset liability mismatch at different periods of time at least up to thirty days. Monthly stress-testing is also required. While the framework requires that managers act at all times in the best interest of investors, it does not clearly state that managers must also aim to keep the investment strategy and the liquidity profile aligned, including in cases of liquidity pressure.

Australia is assessed as Broadly Consistent since the regulatory framework of **Australia** does not prescribe specific elements that REs must address in an on-going liquidity assessment. REs are required to have adequate risk management systems.[63] Regulatory Guidance[64] gives REs guidance on how to comply with the legislation, such as employing tools to identify an emerging liquidity shortage before it occurs but does not prescribe specific elements that REs must address in an on-going liquidity assessment. REs, as Australian Financial Services Licensees, have a duty to do all things necessary to ensure that financial services covered by the license are provided efficiently, honestly and fairly.[65] REs also have a duty to treat members of the same class equally and members of different classes fairly.[66] However, guidance, albeit not exhaustive, is set out in a non-binding regulatory guide to assist REs to maintain adequate risk management systems, including liquidity risk. The same is true for **Canada**, where specific provisions set out in guidance[67] do not cover all relevant key elements and are not directly enforceable.

Switzerland is assessed as Partly Consistent with Recommendation 12. In **Switzerland,** steps have been taken to complement the principle-based approach currently in place.[68] The current principle-based approach is complemented by the Asset Management Association Switzerland (AMAS) code, which also does not require the ongoing monitoring of data to identify liquidity pressures before they crystallise. AMAS requires assessment at least annually, without explicitly identifying the relevant parameters on which basis the frequency should be set. Thus, it does not ensure an effective ongoing LRM process to identify liquidity pressures before they occur. In addition, the regulatory framework does not appear to directly address all key aspects of Recommendation 12.

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[63] s912A(1)(h) Corporations Act 2001

[64] RG 259: https://asic.gov.au/regulatory-resources/find-a-document/regulatory-guides/rg-259-risk-management-systems-of-responsible-entities/

[65] s912A Corporations Act 2001.

[66] s601FC(1)(d) Corporations Act 2001.

[67] CSA Staff notice 81-333

[68] Proposed measures will require REs to ensure adequate liquidity in the CIS they manage, taking into account the investment policy, the assets, the targeted investor base, the distribution of risks and redemption obligations. New art. 78a CISA proposed by the Federal Counsel was adopted by the Swiss Parliament in December 2021.

Recommendation 14:
The responsible entity should conduct ongoing liquidity assessments in different scenarios, which could include fund level stress testing, in line with regulatory guidance.

Rating	Jurisdictions	
Fully Consistent	China France Germany India Ireland	Luxembourg Japan Spain United Kingdom United States
Broadly Consistent	Australia Brazil	Canada
Partly Consistent	Switzerland	
Not Consistent		

In order to be rated Fully Consistent the RT analysed whether the regulatory framework clearly and adequately addressed the essential elements of Recommendation 14:

- Does the regulatory framework provide guidance for ongoing liquidity assessments in different scenarios (e.g., normal and stressed, backward and forward looking)?

- Does the regulatory framework provide guidance for determining appropriate parameters?

Overall, a majority of the Participating Jurisdictions appear to have adopted regulatory frameworks which require that REs conduct ongoing liquidity assessments in different scenarios (e.g., normal, backward or forward looking in addition to stressed). Further, all these jurisdictions provide guidance for determining appropriate parameters (e.g., appropriate for the size, investment strategy, underlying assets and investor profile of the CIS, taking into account other relevant market and regulatory factors).

Three of the Participating Jurisdictions (**Australia, Brazil and Canada**) have met most of the essential elements; however, their regulations do not explicitly require or address the different scenarios that should be considered for testing, such that they are rated as Broadly Consistent. For example, while **Australia** and **Canada's** regulators appear to have issued detailed guidance on the parameters to consider, both of these jurisdictions' rules do not appear to explicitly require ongoing liquidity assessments in different scenarios.[69] Specifically, Australia's guidance does not impose any legal obligations; similarly, Canada's guidance, while detailed, is not legally enforceable.

While **Brazil**'s regulatory framework provides some guidance on the parameters to consider (e.g., list the portfolio liquidity profile, the fund liabilities and any potential or estimated cash requirement against the fund, the outflow expected in normal or stressed conditions against the fund, and the dispersion of investors), the cited regulations do not appear to require the different scenarios that should be considered for testing.

[69] https://asic.gov.au/regulatory-resources/find-a-document/regulatory-guides/rg-259-risk-management-systems-of-responsible-entities/

Switzerland's regulatory framework is rated Partly Consistent because it does not provide sufficient guidance for determining appropriate parameters. While Switzerland's framework does require REs to conduct ongoing liquidity assessments in some scenarios, it does not appear that its regulatory framework provides adequate guidance for determining appropriate parameters.

3.3. Contingency Planning (Recommendations 16 and 17)

Recommendation 16:
The responsible entity should put in place and periodically test contingency plans with an aim to ensure that any applicable liquidity management tools can be used where necessary, and if being activated, can be exercised in a prompt and orderly manner.

Rating	Jurisdictions	
Fully Consistent	Australia Canada China France Germany Ireland	Luxembourg Japan Spain Switzerland United Kingdom United States
Broadly Consistent	India	
Partly Consistent	Brazil	
Not Consistent		

In order to be rated Fully Consistent the RT analysed whether the regulatory framework clearly and adequately addressed the essential elements of Recommendation 16:

- Does the regulatory framework provide for the establishment and periodic testing of contingency plans for the use of liquidity management tools, including in stressed market conditions, in a prompt and orderly manner?

- Does the regulatory framework provide for the governance and oversight of such contingency plans regarding the use of liquidity management tools by the responsible entity?

- Does the regulatory framework provide that the REs maintain the capacity to keep investors and relevant authorities informed promptly of developments related to the use of applicable liquidity management tools?

Fully Consistent ratings were given to jurisdictions with a regulatory framework that aimed to reach the goals of Recommendation 16. Often, the regulatory framework of a jurisdiction requires REs to have contingency plans in place as part of the LRM process in place, but without specifically mentioning to include LMT's in these plans. However, in **Japan** for example, there is a separate requirement for the Board of Directors to confirm whether there are clear written policies on the use of LMT's as part of the Board of Directors' supervision of the effectiveness of liquidity risk management. In **Australia**, the legislation requires REs to have adequate risk management systems, with guidance that expects stress testing to include assessment of available LMT's. In these cases, the RT believes the essential elements and the goal of Recommendation 16 is still met and a Fully Consistent rating can be given.

For **EU jurisdictions**, the RT assessed the EU regulatory framework for AIFs and UCITS as well as national legislation. In the case of AIFs, the AIFMD Delegated Regulation provides for consistency with Recommendations 16 and is directly applicable to all EU jurisdictions. The relevant regulations regarding UCITS (UCITS-Directive), however, have to be transposed into the national frameworks by EU jurisdictions. Therefore, the RT also assessed regulations regarding UCITS at the national level, which were the same as for AIFs in some cases. Furthermore, EU jurisdictions have also adopted the LST Guidelines by ESMA, which provide additional provisions for contingency planning by REs. in the end, all EU jurisdictions were rated as Fully Consistent. For the **UK**, the Commission Delegated Regulation regarding AIFMs also applies, and the UK has adopted ESMA's LST Guidelines as well as implemented relevant contingency planning regulations for UCITS. The UK has therefore also been rated Fully Consistent.

For **India**, which has been rated Broadly Consistent, the regulatory framework only provides for a general risk management function (including liquidity risk); but not for contingency plans (for the use of LMTs). This does not include specific requirements regarding contingency plans. Furthermore, the regulations regarding the risk management function do not include provisions on the use of LMTs. Considering that regulations have been implemented on, for example, general risk management and operating procedures, liquidity stress testing, guidance on the use of specific LMTs, etc.,[70],the RT believes the regulatory framework of India provides some consistency with Recommendation 16. In this light, India has been rated as Broadly Consistent.

Brazil has been rated as Partly Consistent. Because of how LMTs are categorized in Brazil (ordinary, exceptional and eventual LMTs), the regulatory framework does not demand contingency plans for the use of them. That is because ordinary LMTs can be used on a daily basis (so contingency plans for the use of ordinary LMT's do not seem feasible) while exceptional LMTs are only allowed in certain circumstances, after approval in an assembly of investors. In a negative liquidity scenario, the RE must suspend redemptions and call for an assembly of investors to agree on how to deal with the illiquidity scenario. For eventual LMTs, previous approval of investors is also required. There are, however, general requirements for contingency plans as part of the overall risk management but these are not consistent with Recommendation 16, according to the RT. Since the regulatory framework does require REs to follow some kind of contingency procedure (to call for an assembly of investors and decide on the activation of LMTs) in extraordinary circumstances, the RT believes the goal of Recommendation 16 is still partly achieved.

Recommendation 17:
The responsible entity should consider the implementation of additional liquidity management tools to the extent allowed by local law and regulation, in order to protect investors from unfair treatment, amongst other things, or prevent the CIS from diverging significantly from its investment strategy.

Rating	Jurisdictions	
Fully Consistent	Australia	Japan
	China	Luxembourg
	France	Spain

70 SEBI Circular of September 30, 2002 (Risk Management System), SEBI Circular of April 30, 2015 (Stress testing of Liquid Fund and Money Market Mutual Fund Schemes), SEBI Circular of May 31, 2016 (Restriction on Redemption in Mutual Funds), etc.

	Germany India Ireland	Switzerland United Kingdom United States
Broadly Consistent	Brazil Canada	
Partly Consistent		
Not Consistent		

In order to be rated Fully Consistent the RT analysed whether the regulatory framework clearly and adequately addressed the essential elements of Recommendation 17:

- Does your regulatory framework permit the use of additional liquidity management tools?

- Discuss the available liquidity management tools and the framework that REs should observe in their application.

In all jurisdictions rated as Fully Consistent, there are available LMTs to provide flexibility for REs to meet redemptions requests. To this aim, all or most of these tools are available: In-kind redemptions, redemption gates, withdrawals limits, notice periods, extended settlement periods, side pockets and suspensions of redemptions. Additionally, at least one of these tools (anti-dilution levy, swing pricing or redemption fees) is available, enabling transaction costs to be passed to redeeming investors.

In **Australia,**[71] REs must have adequate risk management systems. Guidance[72] sets out ASIC's expectations as to the manner in which REs will comply with this law. This guidance includes, among others, the expectation that the REs conduct stress test analysis for the liquidity risks and assess the available LMTs and the appropriateness of their use.

Moreover, the Australian Corporation Act states that, in exercising its powers and carrying out its duties, the RE of a scheme must, among others, act in the best interests of members, and treat members of the same class equally and members of different classes fairly. To ASIC, 'fairness' implies that the price which members will receive on withdrawal, and the procedures for satisfying withdrawal requests, must be fair to all members as withdrawals from a scheme will not only affect the entitlements of withdrawing members, but also the remaining assets to be attributed to the interests of non-exiting members.[73]

In **Japan**, the appropriate use of LMTs on an ongoing basis is one of the key focuses of the board's management and supervision of the LRM system as a whole. The board is expected to determine whether new LMTs are necessary to deal with any change in circumstances and, if so, ensure that sufficient resources are in place to allow such new LMTs to be implemented smoothly.

In the **UK**, open ended funds are permitted to use LMTs under normal circumstances and the FCA expects them to do so to ensure the on-going fair treatment of all classes of unitholders in a fund.

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[71] See s912A(1)(h) (Corporations Act).

[72] Regulatory Guide (RG) 259.

[73] See RG 134.200 and RG 134.201.

The other two jurisdictions: **Brazil** and **Canada** were rated as Broadly Consistent - in these two cases (Canada and Brazil) there seemed to be a lack of flexibility in applying some of the LMTs. These shortcomings are considered minor providing the availability of LMTs and the overall positive inclination from the supervisory authorities to enable, or even favour, their use.

Under the **EU** framework, the need to consider the use of LMTs as a component of an appropriate LRM program is only required for AIFs. As for UCITS, there is a mention in the ESMA Liquidity Stress Test Guidelines[74] of the recourse to ex post a LMT[75] (extraordinary tools to control or limit dealing in fund units/shares, i.e. suspension of dealing in units, deferral of dealing and side-pocketing) under exceptional circumstances; however, nothing is said on the use of ordinary tools (like notice periods or anti-dilution tools).

In **Germany, Luxembourg** and **Spain**, there are additional national legal provisions or guidelines to supplement the EU framework regarding this minor shortcoming for UCITS asset managers. For France and Ireland, explicit mention of the need to consider using LMTs as part of the LRM program was not present in the national legal framework or guidelines.

Although currently the EU legal framework does not mention the use of ordinary LMTs for UCITS, in practice, there is a substantial number of LMTs available and used across all the EU jurisdictions by UCITS and AIF, including in the **UK**. Some extraordinary tools, like suspensions of redemption and redemption in kind, are included in the EU legal framework, while other ordinary tools like swing pricing or notice periods may be either explicitly allowed by domestic regulations or guidelines, or implicitly allowed by including their use in the fund´s constituent documents approved by the national authority.

Canada provides guidance[76] to investment fund managers on developing and maintaining an effective LRM framework for investment funds. According to this guidance, the use of LMTs to manage potential and actual liquidity issues is a key area of an effective LRM framework. However, Canada was not rated as Fully Consistent since the use of LMTs is subject to an exemptive relief from the CSA. Only three LMTs can be used without CSA permission: redemption fees, in-kind redemptions and suspension of redemptions.

India's legal framework does not contain any explicit mention of the use of LMTs under its LRM policy. There is a general mention referring to the risk management function which is responsible for identifying, evaluating or measuring all risks inherent in a mutual fund organisation, as well as establishing controls to mitigate such risks.

Additionally, a wide number of LMTs is available in India. Its recently adopted hybrid framework for swing pricing is noted and relies on both a partial swing pricing used during normal times and a mandatory full swing pricing that must be used during times of market dislocation.

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74 According to the ESMA LST Guidelines, applying to UCITS and AIF, the liquidity stress test analysis should provide outcomes which (among others) "assist a manager in preparing a fund for a crisis, and in its broader contingency planning. This contingency planning may involve a manager's plans to operationalize applying ex post a-LMT to a fund". All of this with the aim of strengthening the manager's ability to manage fund liquidity in the best interests of investors.

75 Extraordinary LMT (ex post a-LMT) refer to those tools that limit the ability to deal units shares.

76 CSA Staff Notice (81-333)

Brazil was rated as Broadly Consistent since there is no explicit mention of the need for funds to consider using LMTs under their liquidity risk management program. Nevertheless, as in India, there are some general provisions that may be interpreted as supportive of this requirement.[77] A number of LMTs are available and there is also a mandatory requirement of recourse to suspensions of redemptions in extraordinary circumstances. The suspension of redemptions triggers a call for an assembly of investors. Their approval is needed to apply gates, redemptions in kind or side pockets.

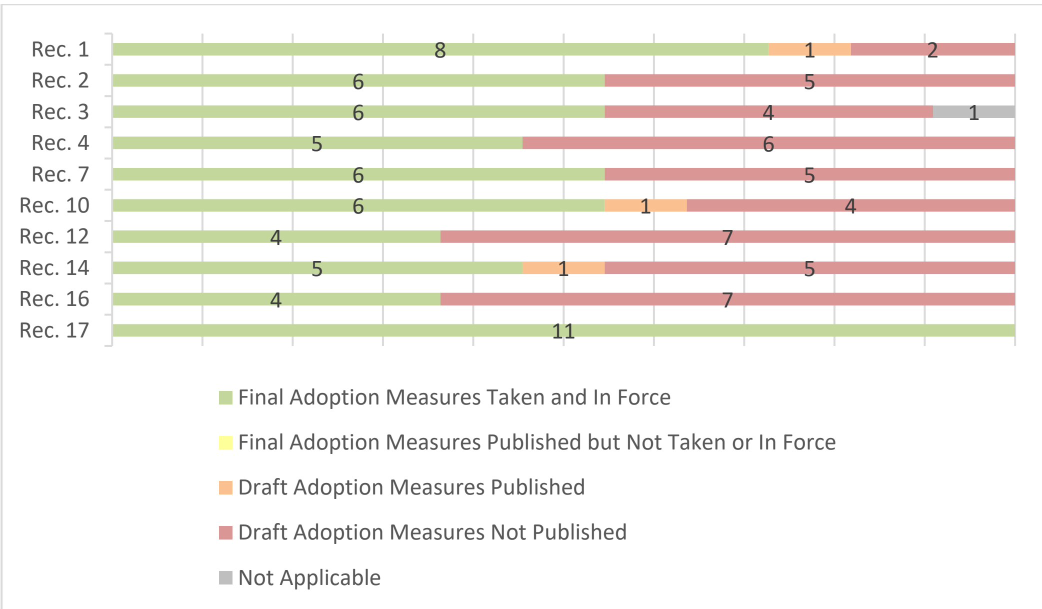
4. OBSERVATIONS ON ADDITIONAL JURISDICTIONS

The RT asked the Additional Jurisdictions[78] to respond to the Survey and provide a self-assessed rating for each of the ten Recommendations supplemented with narrative responses. These responses were then assessed by the RT following a Level 1 assessment. The ratings follow IOSCO's standard rating scale for adoption reviews with a focus on the status of Adoption Measures (i.e., legislative, regulatory and/or policy measures) taken to implement the Recommendations.[79] Based on the responses to the Survey, as well as additional responses and clarifications provided by the Additional Jurisdictions through follow-up questions, the RT determined the final ratings per Recommendation for each Additional Jurisdiction.

4.1. Additional Jurisdictions' Overall Implementation

Box 4 presents a summary of the Additional Jurisdictions' implementation of the ten Recommendations of the LRM Report.

Box 4: Additional Jurisdictions' Ratings (by Recommendation)



77 For example, article 91 of CVM INSTRUCTIONS 555/14 states that "the administrator and the manager should jointly adopt policies, procedures and internal controls necessary so that the fund's portfolio liquidity be compatible with: 1) the deadlines provided for in the regulation for payment of redemption requests; and 2) the fulfilment of the fund's obligations."

78 The additional jurisdictions included in the assessment contain: Italy, the Netherlands, Mexico, Saudi Arabia, Turkey, Argentina, Hong Kong, Indonesia, Korea, Singapore and South Africa.

79 As noted above, this rating scale is limited to the status of measures in these jurisdictions, and is not comparable with the ratings for Participating Jurisdictions.

For Recommendation 1 (relating to the requirement of having an LRM process), eight out of eleven Additional Jurisdictions have been rated as **Final Adoption Measures Taken and In Force**. For Recommendation 17 (relating to the availability of LMTs to REs), all eleven Additional Jurisdictions have been rated as **Final Adoption Measures Taken and In Force**. However, the implementation of other Recommendations which relate to specific areas under the LRM processes (covering liquidity thresholds, dealing arrangements, disclosure of LRM, ongoing assessment of liquidity of portfolio assets, stress testing and contingency plans) is lacking in some Additional Jurisdictions.

The ratings across Additional Jurisdictions vary significantly. Note that the rating scale for the Level 1 assessment does not allow for differentiation in the degree to which certain legislation is consistent with means of implementation of the Recommendations. For some jurisdictions, general requirements regarding LRM processes were implemented but gaps with the Recommendations were noted by the RT. In these instances, the rating would be "Draft Adoption Measures not published". This does not mean there is no legislation regarding LRM in place at all.

Four of the eleven Additional Jurisdictions (Italy, the Netherlands, Hong Kong and Singapore) received a rating of **Final Adoption Measures Taken and In Force** for all ten Recommendations. Five other Additional Jurisdictions (Korea, Mexico, Saudi Arabia, Indonesia, and South Africa) have been rated for some of the ten Recommendations as **Final Adoption Measures Taken and In Force or Draft Adoption Measures Published**. The remaining two Additional Jurisdictions (Turkey and Argentina) received a rating of **Draft Adoption Measures Not Published** for almost all Recommendations, indicating that no published steps have been taken to implement most Recommendations.

4.2. Jurisdictions Implementing All Recommendations

Four out of eleven Additional Jurisdictions (Italy, the Netherlands, Hong Kong and Singapore) were rated as Final Adoption Measures Taken and In Force for all ten Recommendations.

In the cases of Hong Kong and Singapore, guidelines specifically addressing LRM have been issued.

In **Hong Kong**, SFC-authorized funds are required to comply with the Code on Unit Trusts and Mutual Funds (**UT Code**)[80], which sets out, among other things, obligations of management companies of SFC-authorized funds to maintain and implement effective LRM policies and procedures. The SFC has issued a circular to management companies of SFC-authorized funds on LRM[81] to set out the standard as to how the SFC expects management companies should comply with the LRM requirements under the UT Code. Guidance on different aspects concerning LRM is covered under the circular including governance, product design and disclosure, ongoing LRM, stress testing and LMTs, together with examples of good practices. Furthermore, all persons licensed by or registered with the SFC whose business involves the management of funds

80 See Code on Unit Trusts and Mutual Funds: https://www.sfc.hk/-/media/EN/assets/components/codes/files-current/web/codes/sfc-handbook-for-unit-trusts-and-mutual-funds/sfc-handbook-for-unit-trusts-and-mutual-funds.pdf

81 https://www.sfc.hk/edistributionWeb/gateway/EN/circular/openFile?refNo=16EC29

are subject to the Fund Manager Code of Conduct[82] which also sets out the LRM requirements on SFC-licensed management companies.

The Monetary Authority of **Singapore** (**MAS**) also issued Guidelines on Liquidity Risk Management Practices for Fund Management Companies[83] (**Guidelines**) that set out the LRM practices in respect of funds managed by fund management companies (**FMCs**). The Guidelines clearly state that LRM processes must be an integral part of an FMC's broad risk management process and that there should be clear responsibility and accountability in an FMC for implementing its LRM framework and monitoring and managing the liquidity risks associated with its funds.

In the cases of **Italy** and the **Netherlands**, similar to other EU member states, the EU regulations concerning UCITS and AIFs apply. General principles relating to LRM are incorporated under the EU regulations concerning UCITS. For UCITS, which are by definition open-ended, the legislation also includes specific requirements on the eligible assets to ensure the liquidity of their underlying investments and maintenance of their liquidity profile to align with their redemption frequency. The legislation concerning AIFs sets out more specific requirements for different aspects of LRM. For example, detailed requirements including the factors that should be taken into account for liquidity analysis have been included in AIF regulations. Certain EU regulations [84] concerning AIFs are directly applicable to EU member states. Other regulations on UCITS[85] are not directly applicable and need to be implemented in the local national legislation of Italy and the Netherlands. These requirements have been implemented into various legislative acts and regulations in Italy;[86] and in the Netherlands.[87] Italy has also taken a further step to apply some of the regulations concerning AIFs to UCITS.

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82 https://www.sfc.hk/-/media/EN/assets/components/codes/files-current/web/codes/fund-manager-code-of-conduct/fund-manager-code-of-conduct.pdf

83 https://www.mas.gov.sg/regulation/guidelines/guidelines-sfa-04-g08-liquidity-risk-management-practices-for-fund-managers

84 See Commission Delegated Regulation (EU) No 231/2013: https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A32013R0231

85 See Directive 2009/65/EC (UCITS Directive): https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A32009L0065

86 See Consolidated Law on Finance (Legislative Decree 58/1998 (TUF), as amended, https://www.consob.it/web/consob-and-its-activities/laws-and-Regulations/documenti/english/laws/fr_decree58_1998.htm;

Ministerial Decree n. 30 of 5 March 2015 of the Ministry of Economy and Finance (DM 30/2015), https://www.normattiva.it/uri-res/N2Ls?urn:nir:ministero.economia.e.finanze:decreto:2015-03-05;30!vig=;

the Regulation of the Bank of Italy on the collective investment services and managers: https://www.bancaditalia.it/compiti/vigilanza/normativa/archivio-norme/regolamenti/20120508/index.html;

Consob Regulation n. 20307/2018, https://www.consob.it/web/consob-and-its-activities/laws-and-regulations/documenti/english/laws/reg20307e.htm;

Consob Regulation no. 11971 of 14 May 1999, https://www.consob.it/web/consob-and-its-activities/laws-and-regulations.

87 See the Dutch Act on Financial Supervision (Wft) https://wetten.overheid.nl/BWBR0020368/2022-01-01, the Decree on Prudential Rules under the Wft, https://wetten.overheid.nl/BWBR0020420/2021-06-28.and Decree on Conduct of Business Supervision of Financial Undertakings under the Wft, https://wetten.overheid.nl/BWBR0020421/2021-04-01.

4.3. Jurisdictions Implementing Some Recommendations

Five out of eleven additional jurisdictions (Korea, Mexico, Saudi Arabia, Indonesia and South Africa) have implemented some of the Recommendations (two to eight out of the ten Recommendations). For other Recommendations, the legislation in these jurisdictions only includes general principles or lacks references to specific aspects of the Recommendations. Therefore, these jurisdictions were not rated as Final Adoption Measures Taken and In Force for all Recommendations.

Korea has implemented some of the Recommendations (i.e. Recommendations 1, 2, 3, 7, 10 and 17) via different legislations. In addition to the general risk management system requirement under the Act on Corporate Governance of Financial Companies, asset managers are required to assess and manage, among other risks, liquidity risks under Regulations on Financial Investment Business. Enforcement Decree of the Financial Investment Services and Capital Markets Act also requires disclosure to investors on liquidity risks and basic liquidity information. However, the RT has observed gaps in the implementation of the other Recommendations. For example, the requirements relating to stress tests or ongoing liquidity assessments in different scenarios[88] are not legally binding (Recommendation 14). Also, requirements on contingency planning do not specifically relate to the use of liquidity risk management tools (Recommendation 16).

Mexico has implemented some of the Recommendations (i.e., Recommendations 1, 2, 3, 4, 7, 10, 14 and 17) via the investment funds provisions (CUFI)[89] and the investment funds law (IFL)[90]. In particular, CUFI requires asset managers to develop systems to measure, monitor and evaluate liquidity risks and liquidity of assets throughout the lifecycle of a fund, as well as to disclose liquidity risks, the liquidity management process, dealing arrangements and the available LMTs in offering documents. However, the RT has observed gaps between two of the Recommendations and the implemented regulations. For example, regulatory requirements on ensuring the fair treatment of all investors and maintaining alignment between the funds' investment strategy and liquidity profile seem to be lacking (Recommendation 12). While the regulation provides for the testing of contingency plans, it lacks specific reference and elaboration regarding the testing and exercise of liquidity management tools (Recommendation 16). In conclusion, Mexico has implemented the Recommendations to a large extent, but the legislation lacks references to specific aspects of a few of the Recommendations.

In **Saudi Arabia**, the Investment Funds Regulations[91] (**IFRs**) includes general principles which require REs to make a best effort to manage liquidity in order to be able to meet redemptions and that the fund should have sufficient liquidity to fulfil any anticipated redemption request. Therefore, Recommendation 1 is rated as "Final Adoption Measures taken and in force". This rating was also given for Recommendation 17 since the REs are able to deploy various LMTs as long as they are included/disclosed in the funds' terms and conditions/offering documents. However, for most of the other Recommendations, the legislation only has overarching principles

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88 Implemented via the Korea Financial Investment Association Best Practice Guideline (self-regulation) in May 2021.

89 https://www.cnbv.gob.mx/Normatividad/Disposiciones%20de%20car%C3%A1cter%20general%20aplicables%20a%20los%20Fondos%20de%20Inversi%C3%B3n%20y%20a%20las%20personas%20que%20les%20prestan%20servicios.pdf

90 http://www.diputados.gob.mx/LeyesBiblio//pdf_mov/Ley_de_Fondos_de_Inversion.pdf

91 https://cma.org.sa/en/RulesRegulations/Regulations/Documents/IFRs%20Regulations-%20Final%20English.pdf

regarding liquidity or sets out requirements on general risk management policies and procedures and does not have specific provisions relating to LRM. For example, IFRs requires REs to develop policies and procedures that detect risks affecting the funds' investments and ensure treatment of these risks as soon as possible. It does not mention the measurement, monitoring and managing of the fund's liquidity as in Recommendation 10. Overall, except for Recommendations 1 and 17, the legislation appears to be too general without considerations to LRM. The other Recommendations could therefore only be rated as 'Draft Adoption Measures not published'.

In **Indonesia** implementation of the Recommendations is still in progress. Additional LMTs are permitted in their existing regulatory framework and therefore Recommendation 17 has been rated as "Final Adoption Measures taken and in force". The draft adoption measures of other Recommendations have been made public[92] in October 2020. Later, the Indonesia Financial Services Authority (**OJK**) will provide REs with the implementation guidelines in an OJK Circular Letter. The draft regulations include requirements on setting up and maintaining an effective LRM policy and procedure including continuous monitoring of a fund's liquidity which includes stress-test analysis. In view of the aforesaid developments, some of the Recommendations (i.e., Recommendation 1, 10 and 14) have therefore been rated as 'Draft Adoption Measures published'. Whereas for other Recommendations, the RT noted gaps between the draft OJK regulations and the Recommendations. In these instances, the draft regulations included only general provisions regarding LRM and did not cover all the aspects of the Recommendation. For example, according to the draft regulation, REs are required to consider types of investment, liquidity profile, etc. in their LRM policies. It does not, however, refer explicitly to setting liquidity thresholds as referred to in Recommendation 2. Also, despite requiring funds to offer daily redemptions, the regulations have yet to set out the considerations that must be made as to whether a fund should be open-ended (Recommendation 3). Furthermore, there is no requirement for REs to conduct a documented assessment of the likely liquidity risks as part of the initial design process (Recommendation 4). In this light, some of the Recommendations could only be rated as 'Draft Adoption Measures not published'. Even so, Indonesia does have regulations to implement the Recommendations under way. The implementation guidelines that are planned to be circulated in the future may make the regulations more specific.

In **South Africa**, the Recommendations have been implemented to some extent[93]. South Africa is in a top-down process of renewing its legislation following its Authorities' recent transition to a twin peaks model. Accordingly, it is also still in the process of developing more detailed requirements to implement the Recommendations as part of regulatory framework development plan. Under the current legislation, the requirement for REs to have a LRM process is part of a requirement for entities to implement an overall risk management programme (Recommendation 1). South Africa also permits the use of additional LMTs (Recommendation 17). For most of the other Recommendations, however, the regulations concern more general risk management practices and lack specific references to LRM and are therefore rated as "Draft Adoption Measures Not Published". For example, the framework lacks specific linkage to monitoring a fund's liquidity (Recommendation 10). Additionally, there are only general requirements for fund managers to ensure that internal controls are in place without addressing the use of LMTs

92 Through public consultation of the draft OJK Regulation concerning Investment Manager Code of Conduct at https://www.ojk.go.id/id/regulasi/otoritas-jasa-keuangan/rancangan-regulasi/Pages/-Permintaan-Tanggapan-Atas-RPOJK-tentang-Pedoman-Perilaku-Manajer-Investasi.aspx

93 In the Collective Investment Schemes Control Act 45 (CISCA) at http://www.saflii.org/za/legis/consol_act/cisca2002403/; see also and various Board Notices.

(Recommendation 16). Separately, Recommendation 3 is rated as not applicable since all funds in South Africa must be open-end and deal daily. Even though most of the Recommendations are not implemented in the legislation, the RT noted that South Africa is still in the process of developing more detailed requirements to implement the Recommendations. Furthermore, a fund investing in securities is required to invest mostly in liquid assets which may be a mitigating factor for liquidity risks. This is not, however, sufficient for South Africa to be rated as 'Final Adoption Measures taken and in force'. Whilst South African hedge fund legislation is more modern and advanced, resulting in more requirements that are aligned with the Recommendations, the hedge funds' industry AUM is negligible in relation to the balance of the fund industry is South Africa.

4.4. Jurisdictions with Only Limited Implementation

For two out of eleven Additional Jurisdictions (Turkey and Argentina) only Recommendation 17 (out of the ten Recommendations) were rated as Final Adoption Measures Taken and In Force, which reflects that some LMTs are permitted in these two jurisdictions. However, the tools available in these jurisdictions are relatively limited as compared to some other Additional Jurisdictions. While there are some regulations in place regarding general risk management in these jurisdictions, there are no specific provisions on LRM process.

In **Turkey**, there are regulations in place regarding a general risk management process. However, these do not include provisions related to LRM specifically.

For **Argentina,** only Recommendation 17 has been implemented, which reflects that Argentina permits the use of certain additional LMTs. Argentina did not respond affirmatively to most of the survey questions. For the other Recommendations, while references to legislation were provided, these did not relate to LRM.

5. OBSERVATIONS ON MARKET PARTICIPANTS

As a part of the IOSCO AC's work, it is reviewing not just consistency of members' regulatory framework, but also actual implementation of the ten Recommendations by REs. A key component of its implementation assessment was the Market Participants (**MP**) Survey.[94] The MP Survey allowed the AC to gather information on how REs manage liquidity risk in light of the 2018 IOSCO LRM Recommendations. For each of the ten Recommendations under consideration, REs were asked for detailed descriptions of how their LRM process considers and applies various aspects of the Recommendations. Attention was called to various aspects of the Good Practices[95] associated with these Recommendations.

Planning for the AC's review of implementation of the LRM Report was well underway before March 2020, and the MP Survey incorporated specific inquiries regarding March 2020 events. The survey was issued on 5 March 2021 with submissions due on 16 April 2021. IOSCO received responses from seventy-six MPs with broad geographic representation and a diversity in size and type of fund.

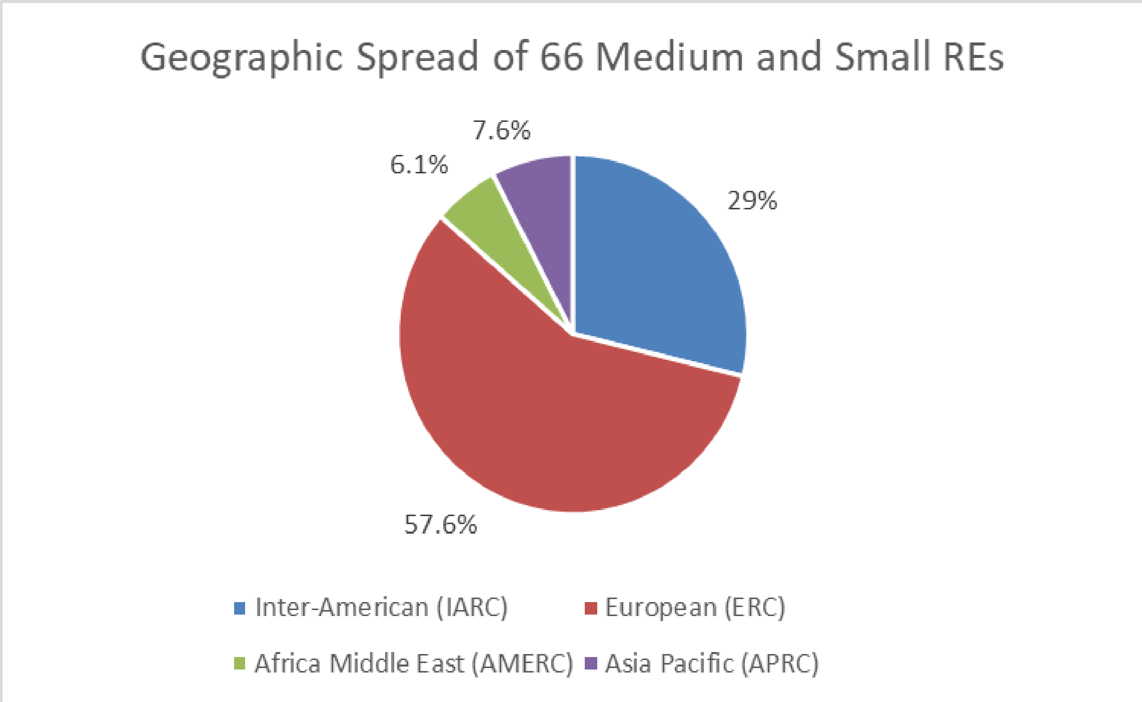
Ten of the RE or fund responses were from REs who operate global funds with substantial AUM

[94] The MP Survey can be found at: https://www.iosco.org/library/pubdocs/zip/IOSCO%20LRM%20Review%20-%20Market%20Participants%20Survey.zip

[95] https://www.iosco.org/library/pubdocs/pdf/IOSCOPD591.pdf

at or near, and some over, $1USD trillion (hereinafter **Large Global REs**). The AC also received responses from other REs, many with large AUM relative to their region and/or jurisdiction, as well as a few REs with relatively smaller AUM and from emerging markets.

Many of the responding REs, beyond the ten the AC has identified as Large Global REs, also operate funds of substantial size and global reach, and their responses demonstrated sophisticated LRM processes. The participation of these Medium and Small REs, including those from less-resourced countries, provided insight into implementation across a broad spectrum of jurisdictions and REs.



The MP Survey was a voluntary survey of REs, intended to supplement the AC understanding of overall implementation of the Recommendations. Information gathered from REs was not considered for the assessment of jurisdictions. The survey responses have also not been used to compare or individually assess REs. The review conducted by the AC in relation to REs is not a compliance or supervisory exercise and the review of RE responses does not include formal ratings of assessment. The review is based on REs' voluntary self-responses which the AC took as good faith. Individual responses remain confidential and have been used only in an anonymized and/or aggregated format.

The review of MP Surveys makes observations about overall trends in the consistency of outcomes achieved by REs in relation to the Recommendations. The information gathered from REs helped inform observations about industry practices on a global basis, including how implementation has furthered the desired outcomes of the Recommendations as well as common challenges that RE responses identified with respect to implementation.

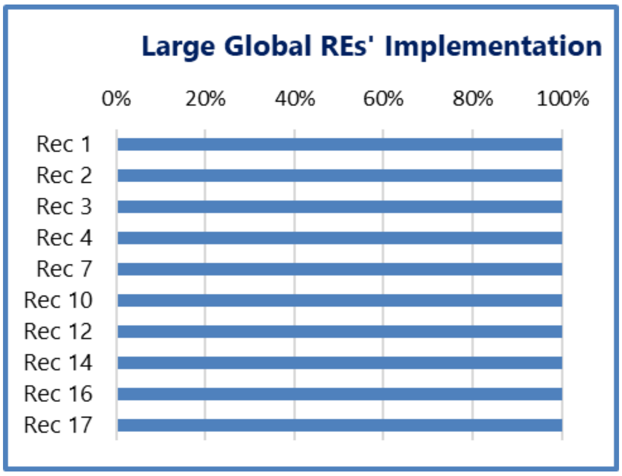
Overall, REs reported significant efforts to implement the Recommendations. Based on the responses, the AC observed a high level of implementation of practices consistent with the Recommendations. The AC also identified certain trends and challenges to implementation, discussed in Section 6.3 below.

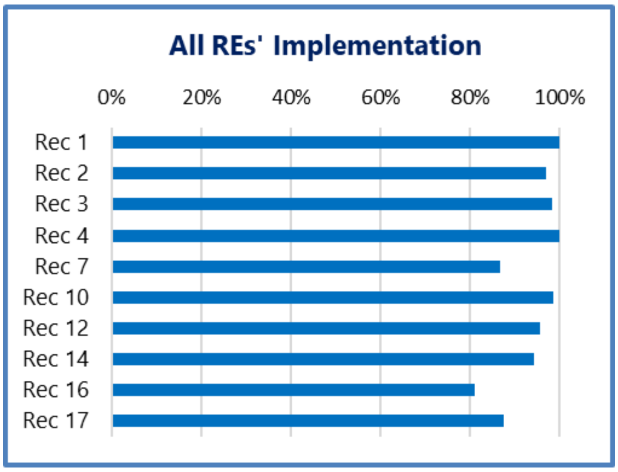
5.1. Key Observations Regarding Market Participants' Practices

Overall, the responding REs demonstrated awareness of the 2018 IOSCO Liquidity Risk Management Recommendations and reported implementation of detailed LRM frameworks. The AC observed that the responses of both Large Global REs and Medium and Small REs showed high levels of consistency across all ten Recommendations. Above 90% of REs described practices consistent with implementation for seven of the ten Recommendations. The AC observed that more than half of the seventy-six respondents described practices whose outcomes are consistent with all of the reviewed Recommendations.

The Large Global REs described practices that were consistent with implementation of all ten Recommendations, including the design Recommendations. For each of the Large Global REs, the RE's LRM framework is part of a broader risk management framework, with detailed governance arrangements for how the LRM was internally overseen and monitored.[96]

For all REs, the responses reflected implementation of the ten Recommendations; the average observed implementation for a given RE, across all Recommendations, was over 93%.[97] Across all REs, observed implementation by Recommendation was also high:





In particular, across all REs, there is implementation of the basic architecture for LRM set forth under Recommendation 1 (detailed requirements on how the RE draws up an effective LRM process) and Recommendation 4 (RE's obligation to ensure that the CIS' dealing arrangements are appropriate for its investment strategy and underlying assets at the design stage and through its product life cycle).

Similarly, for Recommendations 2, 3, 10, 12, and 14, REs describe practices and structures that are consistent with these Recommendations, with very limited exceptions.

While the AC noted the most exceptions and variations in implementation in the responses to Recommendations 7, 16, and 17, over 75% of responding REs described practices that are consistent with each of these Recommendations.

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96 As explained above, this assessment is based upon these Large Global RE's detailed responses.

97 Certain answers by specific REs were deemed insufficiently clear to establish implementation of a Recommendation; these were treated as not implemented for purposes of this assessment.

For Recommendation 7, smaller and less-resourced REs were less likely to provide responses reflecting full adherence with Recommendation 7's liquidity disclosure provisions.

For Recommendations 16 and 17, there was a wider range of responses suggesting some weaknesses in putting in place and periodically testing contingency plans with respect to the activation of LMTs. As discussed below, these REs relied upon assumptions that the design phase, and in particular the presumed liquidity of the AUM, lessened the need for such contingency plans. Yet some of these REs, while not describing full implementation on Recommendation 16 and 17, do perform scenario-based stress-testing and do more restrictively select assets for their funds. For Recommendation 17, some REs are limited in the breadth of LMTs they can use by the applicable regulatory framework (see Section 6.2).
The AC has also identified a number of themes related to the LRM Recommendations, which MPs/REs or regulators may wish to consider. Section 6.3 provides analysis of the following themes, in the context of REs' practices:

- assumptions about the liquidity of certain asset classes;
- limitations on data availability for liquidity risk assessment and stress-testing;
- challenges calculating and interpreting liquidity risk;
- flexibility and the need for human discretion and judgment;
- third party providers for liquidity metrics; and
- legal limitations on the use of LMTs.

5.2. Detailed Review of Market Participants' Practices

This Section provides a detailed review of the practices that REs described for the design process Recommendations, the day to day liquidity Recommendations, and the contingency planning Recommendations, for both the Large Global REs and the Medium and Small REs. For each set of Recommendations, the responses of the ten Large Global REs are summarized separately from the Medium and Small REs, in part to help capture and present sample implementation practices. Each subsection also highlights exceptions to the broad implementation that the AC otherwise observed. The responses of REs of all sizes and from all regions (see the Geographical Spread of Medium and Small REs, above) has been very helpful for the AC to capture the diversity of implementation of the Recommendations by the industry; some of the samples of implementation practices identified below come from REs of all sizes.

The sample implementation practices highlighted below are just some of the shared implementation practices that REs described in their responses. They are not meant to be a comprehensive or fully representative selection of practices.

Discussion of specific examples and challenges are meant to highlight trends and interesting issues for consideration. Responses reflecting unique circumstances of the respondent or its domicile are generally not highlighted or discussed in detail.

6.2.1 Design Recommendations (Recommendations 1, 2, 3, 4, and 7)

Recommendation 1: ***The responsible entity should draw up an effective liquidity risk management process, compliant with local jurisdictional liquidity requirements.***

Responses from the Ten Large Global REs

As stated above, the ten Large Global REs all provided detailed responses. Considering these ten as a group, all of them described practices that are consistent with implementation of **Recommendation 1,** meeting all the LRM design features set forth in Recommendation 1.

These Large Global REs took different approaches to the creation of their LRM frameworks. Many REs are subject to granular, prescriptive regulatory regimes and their implementation measures were designed to comply with these regimes. This includes detailed guidance given by their respective jurisdictions' self-regulatory organizations.

Sample Implementation Practices:

- Several Large Global REs indicated that they assessed future redemption liability based on historical redemption patterns of funds, with some Large Global REs observing that some funds are structured so as to be limited to relatively safe investments from a liquidity perspective, such as equities.

- A Large Global RE observed that its overall governance structure was designed to define investment risk limits based on liquidations over more than one timeframe, including for example a one-day liquidation event and a five-day liquidation timeframe.

- One Large Global RE highlighted that it has a written playbook that details how and when to escalate a liquidity event to management. According to the RE, this document helps ensure that liquidity matters are dealt with swiftly and receive appropriate higher-level attention as needed.

- Another Large Global RE emphasized that its overall LRM process is designed to ensure that there is additional internal liquidity risk scoring on an ex-post basis built into its LRM framework, observing that these data lookbacks help it to identify and anticipate potential future liquidity issues that might not be apparent in the moment.

- One Large Global RE details in its internal procedures how various liquidity reports should be shared with relevant committees on asset class risk and performance and explicitly notes the importance of the process. The RE clearly states that while front-line managers participate in the LRM process, these reports reach senior management and the ultimate LRM responsibility rests with senior management.

- One Large Global RE has established separate committees (such as one for swing pricing, and another for deferred redemption or gating) as part of its designed governance process at the outset, in order to be better prepared to make appropriate and fair decisions on tools (see Recommendation 17).

All ten Large Global REs described detailed LRM frameworks, including governance processes. Liquidity risk is usually monitored on a daily basis at the risk management and portfolio manager's level. These Large Global REs generally have internal policies on how/when to escalate to higher management a perceived or future liquidity event. The AC observed that the frequency of formal reporting on liquidity events and risk to senior management under those governance frameworks was in part a function of the nature of the fund and what it is trading. Accordingly, the AC observed some heterogeneity on the timing and frequency of such formal reporting, but did not observe any frequencies that it considered inconsistent with the Recommendation.

Some REs have built flexibility into the governance process, including when upper management learns about liquidity risk issues, to eliminate hurdles to earlier notification. Thus the governance process rules on escalation set minimum levels for required notification, but even when not specified managers can seek to make a notification to senior management without hitting that level. Moreover, managers can notify more frequently than the base line periodicity for liquidity reports.

- For example, one Large Global RE explains that fund liquidity risk reports are prepared for senior management at least monthly, but the liquidity risk framework and scoring system permit middle-line managers at this fund to escalate at any time the liquidity score when it deteriorates beyond the level set for the fund's risk profile.

While it may be useful to have some flexibility in how often upper management is informed of routine liquidity analyses and stress testing, many REs stated that they also found it useful to have a minimum periodicity for apprising upper management of basic details of the liquidity risk framework's key outputs – adjustments to thresholds, stress testing results, and assessment of trends in asset liquidity and redemptions.

Responses from Medium and Small REs

For **Recommendation 1**, all of the sixty-six Medium and Small REs described practices, including governance and other essential design features for LRM in accordance with Recommendation 1. In particular, the LRM is performed both at the level of the fund and at the level of the underlying assets.

Based on this information, the Medium and Small REs' responses indicated implementation of the basic LRM and governance requirements of Recommendation 1, with risk management teams functionally independent from investment managers' teams. Breaches of thresholds are reported for remediation and escalated to senior management either mechanically or by other means, as necessary.[98]

Sample Implementation Practices:

- In some cases, reporting is quarterly, sometimes monthly, and sometimes different time frames depending on the nature of the data (such as at least monthly, but some matters daily).

[98] The AC observed that some Medium and Small REs reported less complex committee structures, in part because they may have been responding with respect to only one fund. However, the AC did not observe any trends reflecting differences in quality of implementation of the Recommendation.

- One RE created mixed funds with equities and bonds with the intention of diversifying liquidity risks.

- Some REs identified specific asset classes for special treatment and scrutiny based on known liquidity risks, such as special limitations on funds where real estate was an asset under management.

- One RE observed that while its LRM process and structure include the use of third-party providers, it does not rely solely on external third-party liquidity metrics tools and observes that these tools are complementary to its own internal monitoring, assessment, and general LRM governance structure.

Recommendation 2: ***The responsible entity should set appropriate liquidity thresholds which are proportionate to the redemption obligations and liabilities of the CIS.***

Responses from the Ten Large Global REs

In response to questions on **Recommendation 2**, even in jurisdictions which did not have mandated liquidity thresholds, the ten Large Global REs indicated that they have established them.

Sample *Implementation Practices:*

- Some Large Global REs use both internal and vendor systems to assist in calculation of liquidation timelines and horizons.[99]

- Large Global REs established various metrics to assess liquidity risk. One Large Global RE indicated that it regularly measures the number of days required to liquidate its funds, the cost of liquidation, and the results of liquidity assessments in the event of a deterioration in market conditions.

Responses from Medium and Small REs

For **Recommendation 2**, most of the sixty-six Medium and Small REs responses indicated that they have established regular review of liquidity thresholds.[100] Generally, the sixty-six Medium and Small REs described practices consistent with implementation of Recommendation 2, considering both quantitative and qualitative factors in assessing liquidity, with redemption behaviour based on historical analyses.

Sample Implementation Practices:

- Many Medium and Small REs established regular and frequent review of liquidity thresholds.

[99] According to them, this would enable the REs to implement and monitor the LRM process effectively and allows for asset-level liquidity to be analysed.

[100] A few Medium and Small REs gave unclear answers or failed to answer.

- One Medium and Small RE develops a heat map outlining the maximum exposure to different types of risks (market, liquidity, credit, etc.) for each of its specific funds.

- Several Medium and Small REs described multiple layers to assess liquidity, with the RE upper management seeking assessments from multiple sources within the firm. For example, one of the Medium and Small REs explained that it employs a model with three layers as part of its risk governance framework: namely (i) the portfolio manager, (ii) the risk management, and (iii) the internal audit function, that each independently validate investment businesses' adherence to key controls and policies and provides independent substantiation of control issues.

Sample Challenges to Implementation:

There were very few exceptions to the general implementation of Recommendation 2.

- One of the Medium and Small REs indicated that liquidity thresholds are reviewed annually, and a few Medium and Small REs' responses did not clearly state the frequency with which liquidity thresholds are reviewed.

- Another RE from a smaller jurisdiction indicated that its governance process for liquidity thresholds is currently under construction.

- A few REs from two smaller jurisdictions stated that liquidity thresholds are not used to analyze liquidity. One relies upon a qualitative judgment of the liquidity of the assets and the associated liquidity risk metrics.

Recommendation 3: ***The responsible entity should carefully determine a suitable dealing frequency for units in the CIS***.

Responses from the ten Large Global REs

All ten of the Large Global REs responses indicated that they have implemented **Recommendation 3,** as to the setting of an appropriate dealing frequency and the responses generally reflected views consistent with the Recommendation. The Large Global REs have generally calibrated the dealing frequency against asset liquidity and investor profiles in normal times and stress times.[101]

Sample Implementation Practices:

- One Large Global RE noted that the dealing frequency can vary by fund, so that a fund that offers exposure to less liquid assets, such as small-cap equities or emerging markets, should have a longer dealing frequency.

Responses from Medium and Small REs

For **Recommendation 3**, the sixty-six Medium and Small REs generally set dealing frequency as part of the design process and most provided adequate detail to demonstrate implementation of

[101] See the LRM Report, recommendation 3, for additional detail on determining a suitable dealing frequency.

this Recommendation. In describing implementation, most of these respondents indicated that their funds usually provide a daily dealing frequency. While responses were not always specific on how dealing frequency was set, some Medium and Small REs in smaller jurisdictions explained that the relevant local legislation requires a daily frequency. Where daily dealing frequency was chosen, the AC observed that REs generally described practices consistent with managing to that frequency appropriately, such as restricting exposure to assets that are less liquid or likely to become less liquid under stress (e.g., small cap equities, emerging markets, real estate, or high yield bonds).

Sample Implementation Practices:

- For example, one of the Medium and Small REs explained that it tailors the dealing frequency, fund by fund, considering various factors, including the potential size of the product with reference to the relevant market, the nature of the investment assets and the presence of any dealing limitation.

- One RE described in detail how its dealing frequency is determined after a pre-launch quantitative assessment of liquidity based on model portfolios.

- Another RE emphasized that it only uses close-ended funds for assets it views as having inherently low liquidity, such as private equity or real estate assets.

Recommendation 4: ***The responsible entity should ensure that the CIS' dealing (subscription and redemption) arrangements are appropriate for its investment strategy and underlying assets throughout the entire product life cycle, starting at the product design phase.***

Responses from the Ten Large Global REs

The ten Large Global REs have also implemented **Recommendation 4,** ensuring that the dealing arrangements are appropriate for the investment strategy and underlying assets at the design stage and through the product life cycle. When considering their subscription and redemption arrangements, the Large Global REs have generally assessed the liquidity risks likely to face the fund, taking into account the investment strategy, target investors, and the assets and instruments invested in.

Sample Implementation Practices:

- One Large Global RE established internal corporate documents to help make sure its staff was aware that liquidity risk metrics were to be used, in particular, to ensure appropriate dealing arrangements. In some detail, it explained how a variety of liquidity risk metrics and liquidation methodologies were used to assess liquidity generally as well as identification of a liquidity threshold for each fund. The RE noted that this information could ensure that dealing arrangements at the fund's design stage were properly calibrated, so that they remained appropriate. This effort to establish detailed cross-department internal guidance may help ensure that the RE's detailed policies are well-known and followed with care.

Responses from Medium and Small REs

All Medium and Small REs described practices consistent with **Recommendation 4.** When considering their subscription and redemption arrangements, the Medium and Small REs generally assess the liquidity risks likely to face the fund, taking into account the investment strategy, target investors, and the assets and instruments invested in.

Sample Implementation Practices:

- One of the Medium and Small REs explained that for designing any new fund, it divides all products into asset classes, and then assesses the liquidity of each asset class.

- Another such RE explained that it assesses liquidity at every stage of the fund's life. While it invests exclusively in assets it deems liquid, it does not rest upon that assumption. Through a detailed set of arrangements, it has established an internal framework and risk analysis which defines expected levels of liquidity in tranches at expected levels for different stages of the fund. This helps to ensure the dealing arrangement established at the design stage remains appropriate.

Recommendation 7: ***The responsible entity should ensure that liquidity risk and its liquidity risk management process are effectively disclosed to investors and prospective investors.***

Responses from the Ten Large Global REs

All ten of the Large Global REs responses indicated that they have implemented **Recommendation 7** by developing clear policies related to LRM disclosures. The AC observed that most of these disclosures were provided in the prospectus or fact sheets, with some heterogeneity with regard to the periodicity of disclosure.

Sample Implementation Practices:

- One Large Global RE noted that it provides liquidity risk disclosures and warnings in multiple ways and in multiple locations. These include warnings on standard disclosures as well as distributed fact sheets.

- A Large Global RE noted a variety of multiple paths toward detailed disclosure and stated it had a strong preference for disclosure on liquidity risk. This RE explained that it would be very unusual for there to be a conflict between the ability to disclose liquidity management information and proprietary portfolio management process. It stated it wished investors to be advised of liquidity risks and dealing processes so that expectations can be managed. This RE noted that potential conflicts such as disclosure of applicable swing factors can be addressed by releasing information with an appropriate time lag.

- Another Large Global RE said that good practices for disclosure extend beyond lengthy disclosures in terms and conditions, but also highlighting key information in various distribution channels.

Responses from Medium and Small REs

For **Recommendation 7**, the AC observed some exceptions, but the great majority of the sixty-six Medium and Small REs described liquidity disclosure practices consistent with this Recommendation. These Medium and Small REs described various means of disclosure.

Sample Implementation Practices:

- One of the Medium and Small REs created a detailed system which would trigger various levels of warning to investors on liquidity risk, and noted that, if a fund triggers the inclusion of a specific disclosure regarding potential illiquidity, that note is kept on the disclosure throughout the fund's lifetime.

- One of the Medium and Small REs stressed the importance of an appropriate disclosure of liquidity risk to investors before they invest in illiquid funds. This RE stressed that investors should be aware that they would bear the cost of liquidity when they both subscribe and redeem their shares and that this cost can be substantial in stressed market conditions.

- One of the Large Global REs observed an important caveat in its disclosure regime. It noted that there were times when it would act to protect the interests of investors by restricting immediate disclosure on illiquid positions, disclosures that could in fact mislead the investor; for example, a fund can be liquid even if it holds temporarily "illiquid" assets.

Sample Challenges to Implementation:

In terms of the nature of liquidity disclosures to investors under Recommendation 7, the AC observed that a few responses from Medium and Small REs were not consistent with Recommendation 7 or were insufficient for the AC to reach a conclusion.

- One of the Medium and Small REs stated that its funds signalled liquidity changes by making adjustments to entry and exit fees.

- Some Medium and Small REs in smaller jurisdictions stated that their funds invested only in liquid assets, so disclosure is not relevant or needed.[102]

- Another Medium or Small RE from a smaller jurisdiction said that it informs investors of liquidity and liquidity risks simply by publishing on a monthly basis the evolving structure of the fund's assets.

- Another Medium or Small RE from a small jurisdiction said it publishes on a quarterly basis a list of its top ten equity holdings, explaining that a level of liquidity of a fund can be inferred from this information.

[102] For example, some Medium and Small REs reported that their fund invests only in equity assets, which they deem sufficiently liquid. Some Medium and Small REs did not have an explicit or direct references to the disclosure of liquidity risks, including instead references to disclosure of the "liquidity risk measurement methodology" in the initial prospectus.

6.2.2 Day-to-day Liquidity Practices (Recommendations 10, 12, and 14)

Recommendation 10: *The responsible entity should regularly assess the liquidity of the assets held in the portfolio.*

Responses from Ten Large Global REs

With respect to **Recommendation 10**, as set forth above, many Large Global REs have integrated into their LRM governance rules procedures that ensure they regularly measure, monitor and manage liquidity risk.

Sample Implementation Practices:

- Large Global REs consistently had careful rules to ensure that, when assessing liquidity (and in other areas), the risk management function was independent of investment management for purposes of LRM decision making.

- One Large Global RE emphasized that it monitors the credit status of counterparties on an ongoing basis, as a part of its LRM framework, when it has the data to do so.

- One Large Global RE emphasized that appropriate valuation procedures were of paramount importance. The RE has in place written policies and procedures to manage scenarios, including scenarios where fund assets are or become difficult to value. The RE underscored that a sound valuation procedure should consider appropriate models to value assets that are not traded in the active market, or situations where asset market liquidity deteriorates and redemption pressures rise.

Responses from Medium and Small REs

With respect to **Recommendation 10**, nearly all of the Medium and Small REs also implemented processes to regularly assess the liquidity of the assets held in the portfolio.

Sample Implementation Practices:

- One of the Medium and Small REs performs additional liquidity stress testing for funds that have traits indicating they would be more vulnerable to significant short-term redemptions. In addition to the formal liquidity stress testing for other funds, there is additional ad hoc liquidity stress testing to determine liquidity profiles of individuals, or groups of, investment portfolios in anticipation of future or forecast events that might change market liquidity conditions or trigger flow volatility.

- At this same RE, fund managers assess the potential impact of their investment decisions upon a fund's liquidity profile on a pre-trade basis, in a detailed and well-supported way. Fund managers perform this through not only their market knowledge and access to general ongoing information and advice from the investment team, but also with the assistance of embedded risk managers.

Recommendation 12: ***The liquidity risk management process should facilitate the ability of the responsible entity to identify an emerging liquidity shortage before it occurs.***

Responses from Ten Large Global REs

With respect to identifying an emerging liquidity shortage before it is realized, responses to **Recommendation 12** inquiries revealed these Large Global REs' LRM processes facilitate the identification of emerging liquidity risks. These Large Global REs typically use quantitative tools and automation to allow for early detection of trends over time, and also to better understand the potential impacts of emerging trends on fund liquidity.

Responses from Medium and Small REs

With respect to **Recommendation 12**, most of the sixty-six Medium and Small REs indicated that they have in place a system of early warnings to identify potential liquidity shortfalls and described them in adequate detail. The AC observed some exceptions, which appeared to reflect entity-specific shortcomings rather than a broader trend for concern.

Sample Implementation Practices:

- A number of REs use historical flows as a key indicator. One RE indicates it receives several reports during the day with information regarding the flows in each fund.

- One RE indicates maintaining contact with their largest clients in order to monitor their mood.

Sample Challenges to Implementation:

- Seven of the sixty-six Medium and Small REs from smaller jurisdictions did not explain how or whether they have an early warning system or perform any analysis.

- One Medium RE from a smaller jurisdiction explained that it did not forecast potential liquidity shortfalls for funds because it makes excess liquidity provisions available for all fund portfolios, even in the absence of additional redemption requests.[103]

Recommendation 14: ***The responsible entity should conduct ongoing liquidity assessments in different scenarios, which could include fund level stress testing, in line with regulatory guidance.***

Responses from Ten Large Global REs

In response to **Recommendation 14** survey questions, all Large Global REs described full implementation of ongoing liquidity assessments, including stressed scenarios. Many provided substantial details on their assessment approaches. Responses included information about different approaches for different types of funds and market contexts.[104]

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[103] The response indicated that this RE, rather than forecasting potential liquidity shortfalls or taking steps avoid their impact, relies upon their ability to rebalance portfolios to shorter durations and make excess liquidity provisions.

[104] Historical scenarios that were the basis of stress-testing including the Global Financial Crisis (2008), the European Debt Crisis (August 2011), the Flash Crash (May 2010), and the COVID-19 market turmoil (March 2020).

Sample Implementation Practices:

- Large Global REs were quick to modify their assessment regimes to include liquidity risk (in particular) associated with the COVID-19 March 2020 market scenario. For example, one Large Global RE indicated that liquidity assessment analyses are run daily and include stress-testing on such a scenario.

- One Large Global RE has liquidity assessments and stress scenarios done independently by both its risk and portfolio management teams for its funds.

- One Large Global RE indicated that it stress-tests the fund portfolio not just during operation, but initially during the design phase.

- One Large Global RE noted that it attempts, when the data is available, to include in its stress-testing a prediction of the behaviour of other MPs to liquidity shocks, to look at how that behaviour can affect liquidity for the fund.

One Large Global RE responded to the survey with detailed data on its LRM structure and process. It included a confidential copy of its overview of an internal report it uses to help clarify its liquidity stress testing regime. Specifically the internal report:

- includes details on the stress testing approach (including the fund's investment universe, liability profile, investor concentration, and flow volatility);

- reminds its employees how these reports are to be shared with the relevant asset class risk and performance committees, as well as management and certain external oversight entities; and

- illustrates a variety of liquidity risk metrics and liquidation methodologies to be used, including stress testing to assess liquidity generally as well as for setting liquidity thresholds at a fund's design stage.

The responses from Large Global REs often indicated rapid and continual evaluation and refinement of approaches to on-going liquidity assessments. Many Large Global REs indicated that they modified their backward-looking liquidity assessments in light of March 2020 events.

- For example, one Large Global RE explained that, in addition to using backward-looking and forward-looking scenarios, it views every liquidity event as a learning opportunity. After a liquidity event, a fund may be subject to additional internal liquidity risk scoring on an ex-post basis, allowing identification and anticipation of future liquidity issues based on the past event.

This is consistent also with the IOSCO Good Practices, which discusses options for doing liquidity assessments on either a forward and backward-looking basis, and reviews other best practices.[105]

[105] https://www.iosco.org/library/pubdocs/pdf/IOSCOPD591.pdf at Chapter 5, pp.45-46.

Sample Challenges to Implementation:

- One RE noted that it sometimes has difficulty tracking investor fund flow cross-border, something it seeks to track for ongoing liquidity analysis of investor flow and redemption predictions. It attempts to adjust for this problem, such as by supporting pooled funds through a regional product development committee, which determines at the right regional level what products it should be delivering to clients.

Responses from Medium and Small REs

For **Recommendation 14**, the majority of sixty-six Medium and Small REs indicated that they conducted ongoing liquidity assessments in different scenarios consistent with the Recommendation, with the exception of four respondents who indicated that ongoing assessments, including in stressed scenarios, are not part of their LRM framework. Another five Medium and Small REs did not provide clear answers to whether they conduct ongoing liquidity assessments in different scenarios pursuant to the Recommendation.

Sample Implementation Practices:

Many Medium and Small REs noted they use a third-party provider's analytical tool to conduct ongoing liquidity assessments under different scenarios.

- One of the Medium and Small REs explained that this tool addresses multiple asset classes and is designed to support regulatory reporting and liquidity risk and investment management processes.

- Another of the Medium and Small REs explained that it creates a dedicated daily workflow based on this tool and that weekly information is shared with various committees and its board.

Some Medium and Small REs monitor liquidity risk at various levels, depending on their fund structure.

- For example, one of the Medium and Small REs monitors liquidity risk both at the single security and the portfolio level.

- One of the Medium and Small REs monitors its funds' liquidity profiles and redemption profiles with regular liquidity assessments formatted on both a backward-looking and forward-looking basis.

- Another of the Medium and Small REs provided extensive commentary on why expectations around the predictive power of liquidity assessments should be appropriately calibrated, and that it would be unwise to mandate a mechanical and automated course of action in response to a stress result.

- Another Medium and Small RE noted that in addition to assessments at regular intervals, the RE recalibrates its assessment parameters and materiality thresholds whenever there is a local or global liquidity crunch. It does so for both its early warning and test-scoring analyses.

Sample Challenges to Implementation:

Four Medium and Small REs from smaller jurisdictions indicated that ongoing assessments, including in stressed scenarios, are not part of their LRM framework.[106] One of these REs explained that all of their investments are in listed equities.

One of the five Medium and Small REs from a smaller jurisdiction that did not provide a clear answer stated that it currently relies on an independent risk management unit's periodic assessment, and that it would begin doing liquidity risk testing scenarios in 2021. This RE also indicated that they are using historical scenarios for liquidity assessment without further detail.

6.2.3 Contingency Planning (Recommendations 16 and 17)

Recommendation 16: ***The responsible entity should put in place and periodically test contingency plans with an aim to ensure that any applicable liquidity management tools can be used where necessary, and if being activated, can be exercised in a prompt and orderly manner.***

Responses from Ten Large Global REs

All ten of the Large Global REs responses indicated that they have implemented **Recommendation 16**. With respect to Recommendation 16, many Large Global REs mentioned the use of third-party service providers to assist in their decision to use liquidity tools. Many Large Global REs seek to ensure the independence of decision making on whether to use certain liquidity tools.

Sample Implementation Practices:

- One RE's preparation for a liquidity crisis includes mobile phone numbers for all members of its market crisis committee, a checklist of subjects to discuss, and other highly detailed instructions.

- One Large Global RE has separate committees for decision making on using different liquidity tools, given the differing areas of expertise associated with their use (e.g., separate committees for swing pricing, deferred redemption and gating).

Responses from Medium and Small REs

For Recommendation 16, the survey responses of the sixty-six Medium and Small REs indicated most have implemented Recommendation 16; however, the responses from some Medium and Small REs from smaller jurisdictions suggested some limited gaps in implementation or were not clear enough for the AC to determine whether the Recommendation had been implemented.[107]

[106] Two of these respondents were from the same smaller jurisdiction and explained that the government would cover any shortfall due to liquidity stress.

[107] The AC observed that these limited gaps appeared to be entity-specific and did not demonstrate identifiable trends. In addition, for this Recommendation, a higher number of responses were classified as "not clear" and therefore not counted as either a "yes" or "no" for assessing overall implementation.

Sample Implementation Practices:

- Several Medium and Small REs described use of third-party tools to support liquidity assessments, including liquidity classification requirements. One noted that these tools include data and experiences from the 2008 Financial Crisis.

- Many Medium and Small REs stated they were refining their contingency plans, including stress-testing scenarios, in light of COVID.

- One of the Medium and Small REs noted that all new funds have to be approved by its board, and while the RE aims to never gate a fund, it designs and writes into the fund's prospectus a redemption gate for redemptions greater than 10% of NAV.

Sample Challenges to Implementation:

However, a handful of Medium and Small REs provided responses that reflected gaps in implementation.

- A few Medium and Small REs from smaller jurisdictions mentioned regular liquidity assessments, holding excess cash and short-term marketable securities, overdraft facilities or credit lines, and/or stress-testing in lieu of further contingency planning; one explained that given such processes, contingency planning did not seem necessary.

- One RE said that it was only performing liquidity assessments on a monthly basis for its OEFs.

- Another RE stated that the fund it manages presents such a low liquidity risk that it did not justify adoption of contingency plans or ad hoc tools.

Recommendation 17: ***The responsible entity should consider the implementation of additional liquidity management tools to the extent allowed by local law and regulation, in order to protect investors from unfair treatment, amongst other things, or prevent the CIS from diverging significantly from its investment strategy.***

Responses from Ten Large Global REs

All ten of the Large Global REs responses indicated that they have implemented **Recommendation 17** in that they consider the implementation of additional LMTs.

Sample Implementation Practices:

- One RE provided details on how it monitors the liquidity of its funds, observing differences in metrics and tools that it uses, daily, depending on the nature of the assets in the fund. With respect to external third-party liquidity metric tools, it stated that these model results are complementary to its own internal monitoring and assessment tests.

Sample Challenges to Implementation:

With respect to Recommendation 17, it was observed by some respondents that there is an effort within the EU, in the context of a legislative review of the AIFMD Directive, to increase and harmonize the availability of LMTs across EU member states. While most REs have a variety of tools available in many other jurisdictions, Large Global REs also indicated that they are limited in their use of LMTs by the regulatory limitations in certain jurisdictions.[108] Subsequent steps have been taken by certain jurisdiction to enhance their legal framework to facilitate the use of tools.

Responses from Medium and Small REs

The survey responses of the sixty-six Medium and Small REs indicated most have implemented **Recommendation 17.** Some Medium and Small REs indicated that they are using LMTs available to them or considering the use of available tools permitted under local law as set forth in Recommendation 17's means of implementation. Some Medium and Small REs also provided responses reflecting on the availability of LMTs under the applicable regulatory framework.

Sample Challenges to Implementation:

- Some Medium and Small REs in certain jurisdictions characterized their choices of permitted tools as limited.[109]

- A few Medium and Small REs indicated that they do not need to use many LMTs because they only invest in instruments that they deem liquid.[110]

5.3. Observations on Trends and Issues in Implementation

Among the REs' responses, the AC identified a number of themes related to the implementation of the LRM Recommendations in the context of RE practices. These themes are described below, and drive some of the AC's observations related to potential enhancements discussed in the Conclusions section.

6.3.1 Assumptions about the liquidity of asset classes

The market stresses of March 2020 reveal that assuming that certain types of assets do not present a potential liquidity risk, when held in a fund, is problematic.[111] Even asset classes such as equities that can be considered more liquid than real estate can present a problem.

Just a few RE responses indicated that they rely on the *ex-ante* assessment of the assets' liquidity without considering the possibility that market conditions may unexpectedly change. The specific issue is not with identifying assets with historically low liquidity, but over-reliance upon such historical assumptions.

One industry association emphasized that funds with short redemption periods that invest in relatively illiquid assets should be a source of special concern for regulators. In March 2020,

[108] Several respondents included call for the legal ability to use additional liquidity tools in these jurisdictions.

[109] However, one RE in one such jurisdiction expressed the view that using liquidity tools could be detrimental to investors.

[110] For example, one RE explained that they did not consider LMTs other than gating because, in their view, their funds were designed only to invest in liquid asset classes.

[111] https://www.forbes.com/sites/lizfrazierpeck/2021/02/11/the-coronavirus-crash-of-2020-and-the-investing-lesson-it-taught-us/?sh=1e531c8e46cf

funds with exposure to real estate and corporate debt faced liquidity challenges, the association asserted.

6.3.2 Limitations on data availability for liquidity risk assessment and stress-testing certainty

Some REs, especially larger firms, indicated in a variety of ways that their ability to have the most accurate LRM analysis possible depends in part on the reliability of factors they cannot control. These include good-quality data on counterparty credit risk, especially cross-border risks, and good-quality third-party independent valuation of assets.

One Large Global RE noted that it had questioned the value of some third party data inputs bearing on liquidity during March 2020 market stresses, in particular about the third-party valuations during this time period.

Another Large Global RE expressed a number of concerns with respect to obtaining higher quality data bearing on liquidity risks. This RE noted in particular challenges to their ability to access relevant data on the activities of third-party distributed funds; the need for greater cross-border market transparency; the practical limitations on accurately measuring and forecasting liquidation costs and timing given the over-the-counter nature of fixed income markets with limited transparency and relatively modest number of transactions; and finally cautioned against overly prescriptive approaches to and overreliance on stress testing, in light of these challenges.

6.3.3 Challenges calculating and interpreting liquidity risk

Responses varied on how the liquidity of an asset was measured, with some measuring liquidity on a short period of historical volumes.[112] While such a time-span may be relevant for some metrics on an on-going analysis of liquidity, such a short span could hide the possibility of an imminent drop in liquidity should market conditions vary quickly.

Several REs have noted difficulties in obtaining precise, reliable data on their investor base. Many of these REs rely primarily on historical flows and expert judgment for liquidity calculations. For example, one RE uses a quasi-uniform hypothesis of 10% outflows on a daily basis, which corresponds to the threshold from which gating may be envisaged by the manager as stated in the legal documentation. Just a few indicated that they resolve this quandary using only qualitative assessment to assess liquidity in their funds (thus making the establishment of reliable liquidity thresholds impossible).[113]

One RE provided a detailed analysis and observations of challenges to assessing liquidity risks of less liquid assets. The RE noted, among other things, that the ability to calculate liquidity risks and thresholds reliably may become limited, which may make the utility of such thresholds limited as well. The RE referenced various strategies to address these challenges, including passing on the cost of liquidity to subscribing and redeeming investors and disclosure to investors regarding potential liquidity costs in stressed market conditions. The RE also expressed its view that OEFs should not be mandated to hold liquidity buffers because this is not a concept adapted to funds.

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[112] In one outlier instance, the short period of historical volumes that was used was just 20 days.

[113] Once such fund explains that it invests in assets that are deemed liquid.

6.3.4 Flexibility and the need for human discretion and judgment

While REs were often quite detailed in presentation of their LRM architecture, such as liquidity thresholds and triggers, several Large Global REs stated that human discretion and judgment are often key to major decisions on using LMTs. Some REs seem to expressly provide for middle-level managers to escalate liquidity concerns outside of periodic reporting, even if the concerns do not trigger certain thresholds.

On the other hand, just a few REs from smaller jurisdictions indicated that they rely exclusively on qualitative assessments. While actively managing funds is ultimately a qualitative assessment by fund managers, quantitative data can greatly help to make a more informed decision.

6.3.5 Frequent Use of the Same Third-Party Provider for Liquidity Metrics

As noted above, many REs identified the same third-party provider for use of liquidity metrics. There is a potential for over-reliance by using one provider for such metrics, although some REs noted that they do not solely rely upon this provider in their quantitative liquidity assessments. The common use of one provider raises a potential herding risk: if all managers receive the same market signals from same liquidity metrics provider, it could trigger the similar actions by different managers, therefore amplifying a market trend, at least in the short-term.

6.3.6 Legal limitations on the use of LMTs

The Recommendations do not prescribe which specific LMTs that REs must use. Some REs expressed concerns regarding legal restrictions in their jurisdictions on which LMTs they can use. As written, the Recommendations do encourage jurisdictions to make an adequate range of LMTs available to REs.

5.4. Market Participant Responses Regarding March 2020 Market Turmoil

In March 2020, many OEFs faced liquidity pressures, dealing with large outflows and deterioration in market liquidity. The MP Survey collected data on REs' experiences in the March 2020 market turmoil. The AC has reviewed these responses, as well as mention of March 2020 in the responses to the survey on the Recommendations, for the limited purpose of gleaning information bearing directly on its broader assessment of IOSCO members' LRM regimes. MPs' input and responses regarding the March 2020 market turmoil were also considered more broadly in the context of joint IOSCO and FSB work on OEFs, and helped to inform the analyses performed as part of that work, which are reflected in the FSB Progress Report on *Enhancing the Resilience of Non-Bank Financial Intermediation*.[114]

6. CONCLUSIONS

Based on the observations of the Review, the AC determined that, among Participating Jurisdictions, there was a high degree of implementation of regulatory requirements consistent with the objectives of the Recommendations. Seven of the fourteen Participating Jurisdictions are **Fully Consistent** with all ten Recommendations, and twelve of the fourteen Participating

[114] Enhancing the Resilience of Non-Bank Financial Intermediation: Progress Report, at: https://www.fsb.org/wp-content/uploads/P011121.pdf

Jurisdictions are Fully Consistent for at least six of the Recommendations. All fourteen Participating Jurisdictions are at least **Partly Consistent** with all ten Recommendations.

Considering the observations regarding Additional Jurisdictions, the AC concluded that there were significant additional efforts to adopt regulatory requirements implementing the Recommendations. Notably, four Additional Jurisdictions have **Final Adoption Measures Taken and In Force** for all ten Recommendations, while five other Additional Jurisdictions have **Final Adoption Measures Taken and In Force or Draft Adoption Measures Published** for some of the ten Recommendations.

In addition, most RE survey respondents also reported a high level of implementation of the Recommendations in their policies and practices. All of the Large Global REs described practices that were consistent with implementation of all ten Recommendations. More than half of the seventy-six respondents described practices whose outcomes are consistent with all of the reviewed Recommendations. For all REs, the average observed implementation for a given RE, across all Recommendations, was over ninety-three percent.

The AC observed some gaps or shortcomings of different degrees of materiality in some Participating Jurisdictions for one or more of the Recommendations. Such gaps and shortcomings were noted in regulatory frameworks as to:

- addressing all elements of the Recommendations, or providing detailed guidance for some aspects of the Recommendations;
- the consideration of certain elements at the design stage or throughout the entire product life cycle;
- making certain elements optional or considerations instead of mandates; and
- the enforceability of some guidance.

With respect to market participant practices, the AC noted the most exceptions and variations in implementation in the RE responses to Recommendations 7, 16, and 17. For Recommendation 7, smaller and less-resourced REs were less likely to provide responses reflecting full adherence with Recommendation 7's liquidity disclosure provisions. For Recommendations 16 and 17, there was a wider range of responses suggesting some weaknesses in putting in place and periodically testing contingency plans with respect to the activation of LMTs. For Recommendation 17, some REs are limited in the breadth of LMTs they can use by the applicable regulatory framework

In assessing the Participating Jurisdictions' regulatory frameworks for consistency with the Recommendations and reviewing the description of policies and practices provided by REs, the AC found that overall, there was a high level of implementation, both in regulatory frameworks and in practice. The AC also identified some themes related to implementation of the LRM Recommendations that present challenges. Relevant jurisdictions may wish to consider these challenges in their markets in connection with further implementation steps. REs may also wish to consider these themes in connection with their implementation of LRM frameworks.

The AC's observations are summarized below. Concurrent with the AC's review, the FSB's open-ended fund assessment workstream (OEFA) is undertaking an assessment of the effectiveness of the 2017 FSB's policy recommendations on liquidity mismatch in OEFs (being operationalised through 2018 IOSCO's LRM Recommendations) from a financial stability perspective. The

OEFA will present the main findings and policy implications of their assessment.[115] The AC's focus is on the gaps and challenges observed through its review, including challenges identified by REs. The AC has identified some ways that these gaps and challenges could be mitigated by jurisdictions or in the market; it is beyond the AC mandate to propose specific enhancements to the 2018 Recommendations.

6.1. CIS Design Process (Recommendations 1, 2, 3, 4, and 7)

As a result of the review of Participating Jurisdictions' consistency with the Design Process Recommendations, as well as REs' implementation of Design Process practices, the AC identified common themes that may warrant further attention, including challenges with respect to dealing frequency under Recommendation 3, dealing arrangements under Recommendation 4, and disclosure practices under Recommendation 7.

Recommendation 1

Most Participating Jurisdictions are rated Fully Consistent with Recommendation 1, as they have adequately addressed all relevant elements of a proper liquidity management process in domestic regulation, including provisions concerning governance, types of instruments invested by funds, targeted investors and requirements for compatibility between assets and dealing frequency, and in varied market conditions and since the inception of the fund.

One Participating Jurisdiction is rated Broadly Consistent. In that case, the regulatory framework does not require consideration of the liquidity of the instruments and how the RE will manage assets consistent with obligations and liabilities at the design stage.

Recommendation 2

All Participating Jurisdictions are rated Fully Consistent with Recommendation 2, having adequately addressed all the elements of the Recommendation. While the language of the rules varies among Participating Jurisdictions, REs are essentially required to set thresholds for liquidity, which are designed in line with the principle of fair treatment of investors and must be tailored considering the relevant factors such as the investment strategy and redemption obligation. Such thresholds are also expected to act as a signal or early warning to enable REs to consider whether and what further remedial actions may be necessary.

Recommendation 3

Recommendation 3 requires a suitable dealing frequency and offers guidance on determining the suitable frequency. Recommendation 3 does not impose detailed or granular requirements on how dealing frequency is calculated and communicated to REs. While nearly all Participating Jurisdictions had regulatory frameworks consistent with Recommendation 3, the issue of how to

[115] The FSB published Policy recommendations to address structural vulnerabilities from asset management activities in 2017. The recommendations covered, among other issues, liquidity mismatch in OEFs. IOSCO operationalised these by issuing recommendations in 2018 on the measures to improve funds' LRM. It was agreed that once the implementation of the FSB policy recommendations has progressed, IOSCO and the FSB would assess if these recommendations have been implemented effectively, and the FSB would report back to the G20. The OEFA's work builds on the findings of the joint FSB/SCAV and IOSCO/FSEG report of December 2021 that analysed liquidity risk and its management in OEFs during the March 2020 turmoil and runs in parallel to the AC's review on a coordinated approach.

calculate a suitable dealing frequency consistent with investment objectives, assets and liabilities, is a fairly technical one. Participating Jurisdictions had a wide variety of approaches in terms of ensuring that the dealing frequency is consistent with CIS investment objectives and expected liabilities.

Some Participating Jurisdictions varied dealing frequency according to the liquidity of the underlying asset classes. For example, a CIS comprised of substantial blue-chip equity assets could have daily dealing frequency, while a CIS with many real estate assets would not.

The AC notes that more detailed and specific guidance in this area from jurisdictions could enhance regulatory approaches to dealing frequency. For example, the appropriate dealing frequency could vary based on the liquidity of assets, including limitations on dealing frequency for presumed illiquid assets such as real estate. Finally, the AC emphasizes the importance of the principle of fair treatment to all investors, and it observed some challenges in this regard. Further guidance from jurisdictions could be helpful (for example, attributing costs associated with participants entering or leaving a CIS fairly to those participants).

Recommendation 4

Most of the Participating Jurisdictions are rated Fully Consistent with Recommendation 4. Their regulations require the RE to set CIS dealing arrangements (i.e. subscription and redemption) that are appropriate through the entire product life cycle, starting at the design phase, with regard to its investment strategy and underlying assets. Their regulations also require the RE to conduct a documented assessment of the likely liquidity risks facing an open-ended CIS as part of their initial design process. Only two Participating Jurisdictions are rated Broadly Consistent because it is not clear that their regulations require the RE to conduct a documented assessment of the likely liquidity risks facing an open-ended CIS as part of their initial design process. (e.g. LRM is not focused only on the subsequent life cycle of the open-ended CIS). In such jurisdictions, further guidance could be helpful, for example, addressing a documented assessment of the likely liquidity risks in connection with dealing arrangements as part of the initial design process.

Recommendation 7

Most of the Participating Jurisdictions are rated Fully or Broadly Consistent with Recommendation 7. Nine Participating Jurisdictions are rated Fully Consistent because their regulatory frameworks have adequately addressed essential elements of disclosure relating to liquidity risk and information, while the five Participating Jurisdictions rated Broadly Consistent have minor gaps, such as a lack of more granular disclosure requirements on the process for mitigating liquidity risk.

For some of the Participating Jurisdictions that have been rated Broadly Consistent, although granular disclosure requirements concerning liquidity risk are not clearly specified in their regulatory framework, they responded that such disclosures are considered during the fund authorization and/or supervision process. Relevant jurisdictions may wish to consider incorporating more detailed and explicit disclosure requirements on liquidity risk into their regulatory framework where appropriate.

The AC also observed in its review of RE practices that most disclosures were provided in the prospectus or fact sheets, with some heterogeneity with regard to the periodicity of disclosure. This Recommendation and the related Good Practices deal with the disclosure of the liquidity risk and how it is managed to investors, but do not relate to frequency of disclosure. Additional guidance from jurisdictions regarding periodicity of liquidity risk disclosure could be useful to REs.

6.2. Day-to-day Liquidity Management Practices (Recommendations 10, 12, and 14)

After considering the review of Participating Jurisdictions' consistency with, and REs implementation of, the Day-to-day Liquidity Management Recommendations, the AC identified several areas that may warrant further attention, including where further implementation or potential enhancements could be helpful. In particular, jurisdictions may wish to consider further attention to the identification of an emerging liquidity shortage before it occurs under Recommendation 12, and further guidance under Recommendation 12 regarding criteria to keep the investment strategy, liquidity profile and redemption policy aligned could be beneficial. Other areas that may warrant further attention include data availability and third party providers of liquidity metrics.

Recommendation 10

At a high level, all of the Participating Jurisdictions assessed require REs to have in place frameworks or arrangements to regularly measure, monitor and manage funds' liquidity. Most, but not all Participating Jurisdictions could show that they require REs to take a range of relevant issues into account, for example, obligations to creditors, counterparties and other third parties; the time it takes to liquidate assets; the price at which that can be done and the effect of any settlement lags.

However, some Participating Jurisdictions' requirements are framed as principles and do not capture the full meaning of the Recommendation. For example, in some Participating Jurisdictions there is no enforceable requirement for REs to use stress testing or they do not specify guidance and appear unable to demonstrate requirements for REs to take into account the relevant issues noted above, and so it is not clear this is carried out. These factors have prevented them from being rated Fully Consistent with the Recommendation. Effectiveness hinges on clear requirements to take into account a range of relevant factors on an on-going basis. Proper implementation of this Recommendation enables REs to meet the elements set out by subsequent Recommendations, regarding a regular flow of accurate and timely information.

Recommendation 12

Most of the assessed Participating Jurisdictions require REs to have procedures in place to identify an emerging liquidity shortage before it occurs. In some Participating Jurisdictions, the identification of a liquidity shortage may be amalgamated with requirements to hold a minimum percentage of liquid assets at all times. This approach may not ensure that funds keep their investment strategy aligned with their liquidity profile and redemption policy because it may incentivize managers to first sell the most liquid assets to meet redemptions in order to keep the liquidity buffer above the regulatory threshold, while deteriorating the overall fund's liquidity.

To address OEFs' vulnerabilities, and in particular liquidity mismatches, it is essential to strengthen the ability to manage liquidity risk appropriately, especially when funds invest in low-liquid assets.

Ongoing liquidity monitoring could benefit from the development of further guidance from jurisdictions with exemplificative criteria that would stress in particular the importance of keeping the investment strategy, liquidity profile and redemption policy aligned. Those criteria may be computed depending on the types of OEFs, their universe of investment and/or the targeted investors and monitored so that breaches of internal limits could be remediated in a timely manner.

Based on the Market Participants survey responses, stress testing appears to be a common tool used to assess liquidity risk, but a few of the MPs noted some challenges exist regarding a lack of data availability for certain types of assets.

In addition, a few Market Participants noted limitations on the number of third party providers for computing liquidity metrics, which could raise some concerns. If market data are processed homogenously, asset managers may also react homogenously in adverse market conditions (herding behaviour).

Recommendation 14

Most Participating Jurisdictions appear to require that REs conduct ongoing liquidity assessments in different scenarios. Specifically, the AC observed that nearly all Participating Jurisdictions provide guidance for liquidity assessments in different scenarios and for determining appropriate parameters.

The AC noted that one Participating Jurisdiction does not provide guidance for specifying different scenarios, while another Participating Jurisdiction does not specify guidance for determining appropriate parameters. Relevant jurisdictions may wish to consider providing further guidance in these areas.

6.3. Contingency Planning (Recommendations 16 and 17)

In light of the review of Participating Jurisdictions' consistency with, and REs implementation of, the Contingency Planning Recommendations, the AC identified two areas for further implementation or potential enhancements. Relevant jurisdictions may wish to consider supplementing their regulations with requirements that are more specific or guidance regarding contingency plans for the use of LMTs under Recommendation 16, and jurisdictions may wish to further address the availability of LMTs under Recommendation 17.

Recommendation 16

Most Participating Jurisdictions have legislation consistent with Recommendation 16, although the implementation differs across Participating Jurisdictions. In some cases, there is a requirement for REs to have contingency plans in place as part of the LRM process. The use of LMTs is sometimes part of mandatory stress testing, and in some Participating Jurisdictions the relevant authority issued guidance regarding the use of specific LMTs. Participating Jurisdictions also have various regulations regarding the governance and oversight of such contingency plans, for example regarding responsibilities, independence and reporting lines. In this way, the necessary elements for consistency with Recommendation 16 have been met.

In two cases, the implementation was not Fully Consistent with Recommendation 16. In one case, the implemented regulations regarding LRM do not specifically mention the requirement to have contingency plans in place for REs. The use of LMTs is also not mentioned in the regulations. In the other case, there are only some requirements regarding contingency plans as part of a general risk management framework that do not include the use of LMTs. Relevant jurisdictions may wish to consider supplementing their regulations with requirements that are more specific or guidance regarding contingency plans for the use of LMTs.

Recommendation 17

LMTs are available in all the assessed Participating Jurisdictions. These tools can be used with two different aims: to provide flexibility (in terms of time) to address redemptions[116] and to provide an anti-dilution effect by passing transaction costs to redeeming investors.[117] Except for the extraordinary LMTs (i.e,. suspensions of redemptions), the availability of LMTs is not usually contemplated in domestic laws or regulations. Instead, either the National Competent Authorities (NCAs) give an implicit authorisation to their use by allowing them to be included in the constituent document of the fund and/or by providing guidance (through circulars, staff letters and guidelines) on their application.

Recommendation 17 provides that RE's should consider implementing additional LMTs to the extent allowed by local law and regulation. Where LMTs are available, REs have the responsibility and are best placed to assess, manage and review a fund's liquidity risks and to decide on the most appropriate tools and whether to implement them.

A few REs expressed concerns regarding legal restrictions in their jurisdictions on which LMTs they can use. As written, Recommendation 17 encourages jurisdictions to make an adequate range of LMTs available to REs. One potential enhancement relevant jurisdictions could consider would be specifically identifying consideration of the use of LMTs as an element of routine liquidity management activities. More than half of the Participating Jurisdictions appear to do so.

6.4. Additional Jurisdictions

The AC noted significant variation on the level of adoption of the Recommendations among Additional Jurisdictions. While four Additional Jurisdictions have implemented all of the Recommendations, some Additional Jurisdictions have implemented some of the Recommendations and two Additional Jurisdictions only adopted one of the Recommendations.

The AC observed that all or most Additional Jurisdictions have adopted measures to implement Recommendations 1 (regarding drawing up an LRM process) and 17 (relating to the availability of LMTs to REs). However, the implementation of other Recommendations that relate to specific areas under the LRM processes (covering liquidity thresholds, dealing arrangements, disclosure of LRM, and ongoing assessment of liquidity of portfolio assets, stress testing and contingency plans) is lacking in some Additional Jurisdictions. For these Recommendations, the legislation in these Additional Jurisdictions only include general principles or lack references to specific aspects of the Recommendations.

Jurisdictions that have limited implementation of the Recommendations may wish to consider revisiting the Recommendations and conducting a comprehensive review to enhance their regulatory framework on liquidity risk management.

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[116] Examples of tools used for this purpose are: notice periods, lengthen the settlement period, gates, suspensions of redemptions, side-pockets.

[117] Examples of tools used for this purpose are: swing-pricing, redemption fee, anti-dilution levy and shifting valuation from mid to bid pricing.

ANNEX A – ASSESSMENT METHODOLOGY AND SURVEY QUESTIONNAIRE FOR JURISDICTIONS

Available at - https://www.iosco.org/library/pubdocs/pdf/AC LRM - Assessment Methodology and Regulators Survey.pdf

ANNEX B: LIST OF JURISDICTIONS

Participating Jurisdictions

Name	Total Asset USD (excluding pension assets)	% of Global AUM
United States	26,740,649,149,461.00	53.30%
Luxembourg	4,580,337,940,781.00	9.13%
Ireland	2,682,609,870,522.00	5.35%
Brazil	1,962,396,625,948.00	3.91%
China	1,900,526,907,625.00	3.79%
Canada	1,706,846,448,887.00	3.40%
United Kingdom	1,668,888,957,816.00	3.33%
France	1,208,098,136,203.00	2.41%
Japan	910,681,484,624.00	1.82%
Switzerland	758,949,387,410.00	1.51%
Australia	754,548,166,644.00	1.41%
Germany	642,831,409,506.00	1.28%
India	379,634,827,571.00	0.76%
Spain	322,259,722,196.00	0.64%
Total		**92.03%**

Source – Bloomberg (Aug 2019)

Additional Jurisdictions (Other FSB Jurisdictions)

1. Argentina
2. Hong Kong SAR
3. Indonesia
4. Italy
5. Korea
6. Mexico
7. The Netherlands
8. Saudi Arabia
9. Singapore
10. South Africa
11. Turkey