

Autorités canadiennes en valeurs mobilières

### **CSA Consultation Paper 81-409** Enhancing Exchange-Traded Fund Regulation: **Proposed Approaches and Discussion**

June 19, 2025

#### Introduction Ι.

The Canadian Securities Administrators (the **CSA** or **we**) are considering potential amendments to the investment funds regulatory framework for exchange-traded funds (ETFs).<sup>1</sup> Since the introduction of the first ETF in Canada in 1990, ETFs have experienced strong growth, with assets under management reaching \$518 billion by December 31, 2024, representing approximately 19% of publicly offered fund assets.<sup>2</sup> As of the end of 2024, 45 ETF providers offer over 1,200 ETFs in Canada.<sup>3</sup> ETFs provide ready access to a wide range of investment exposures and strategies and offer intraday liquidity through their exchange listing. Retail investors make significant use of ETFs, with retail holdings of ETFs comprising approximately 62% of total ETF assets as of December 2024.<sup>4</sup>

The International Organization of Securities Commissions (IOSCO) recently considered the performance of ETFs during the COVID-19 pandemic induced market stress in March and April 2020, during which ETFs underwent significant stress.<sup>5</sup> Generally, IOSCO found that while certain subsets of ETFs temporarily experienced unusual trading behaviors, the ETF structure demonstrated resilience throughout the stress period, with no major risks or fragilities. The resilience of the ETF structure during that period of volatility could further increase the adoption of ETFs, making them an important area of focus for the CSA.

Since their introduction, the ETF market in Canada has evolved substantially. Initially, ETFs aimed to replicate the performance of broad Canadian and U.S. equity market indices, offering low-cost portfolio diversification. Since then, Canadian ETFs have evolved and now offer exposure to a wide range of assets and investment strategies, including index tracking, smart beta strategies, daily leveraged/inverse exposure to indexes and commodity prices, asset allocation, and active management strategies. Some ETFs use alternative investment strategies permitted under National Instrument 81-102 Investment Funds (NI 81-102).

All rights in the information provided by Institutional Shareholder Services Canada Inc. and its affiliates (ISS) reside with ISSCI and/or its licensors. ISSCI makes no express or implied warranties of any kind and shall have no liability for any errors, omissions or interruptions in or in connection with any data provided by ISSCI.

<sup>&</sup>lt;sup>1</sup> See the definition of "ETF" in National Instrument 41-101 *General Prospectus Requirements*.

<sup>&</sup>lt;sup>2</sup> Securities and Investment Management Association, SIMA (formerly IFIC), 2024 Investment Funds Report January 31, 2025 (SIMA 2024 Report). ETF net assets represent approximately 19% of total public investment fund assets (mutual funds (\$2,242 billion) and ETFs (\$518 billion)) as of December 31, 2024.

<sup>&</sup>lt;sup>3</sup> See SIMA 2024 Report.

<sup>&</sup>lt;sup>4</sup> Represents Canadian retail investors' share of total Canadian-listed ETF assets. Data provided by ISS Market Intelligence, Investor Economics ETF and Index Funds Report (Q4 2024).

<sup>&</sup>lt;sup>5</sup> International Organization of Securities Commissions (**IOSCO**), Exchange Traded Funds Thematic Note - Findings and Observations during COVID-19 induced market stresses (2018, available at https://www.iosco.org/library/pubdocs/pdf/IOSCOPD682.pdf.

In recent years, as ETFs have grown, multiplied and evolved, regulators in other jurisdictions have developed and implemented requirements or published consultations, recommendations, and guidance for ETFs.<sup>6</sup> In May 2023, IOSCO published *Good Practices Relating to the Implementation of the IOSCO Principles for Exchange Traded Funds*<sup>7</sup> (the **IOSCO ETF Good Practices**) to supplement the *IOSCO Principles for the Regulation of ETFs*<sup>8</sup> (the **IOSCO ETF Principles**) and provide examples of how the IOSCO ETF Principles could be put in practice.

Currently, under the CSA's investment fund rules, ETFs are regulated under a substantially similar framework as conventional mutual funds, as both types of products are "mutual funds" under securities legislation by virtue of their offering of securities that are redeemable on demand at net asset value (**NAV**). For example, ETFs are subject to the same investment restrictions applicable to mutual funds, including portfolio diversification requirements and limits on illiquid assets set out in NI 81-102.

While the existing regulatory framework addresses some features of ETFs,<sup>9</sup> it is not highly tailored to them. ETFs have unique features that distinguish them from conventional mutual funds, namely, their unit creation and redemption mechanism, the secondary market trading of their units and the associated arbitrage mechanism that acts to keep the secondary market price of an ETF close to the underlying value of its portfolio. These features are discussed in greater detail in subsection II.A below.

In 2023, members of the CSA commenced a review to assess whether the current regulations for ETFs remain appropriate, focusing on the unique features of ETFs (the **ETF Review**).<sup>10</sup> The ETF Review involved (a) a study of the Canadian ETF market, and (b) an analysis to identify potential gaps in the existing regulatory framework and ways to update and enhance the existing framework. The Thought Leadership Division of the Ontario Securities Commission (**OSC**) conducted the study of the Canadian ETF market, analyzing its composition and secondary market activity, including factors that may affect ETF trading liquidity and arbitrage. The findings from the study informed our analysis of potential gaps and are detailed in the OSC

<sup>6</sup> See, for example, U.S. Securities and Exchange Commission, Exchange Traded Funds, Release No. IC-33646 (2019), *available at* <u>https://www.sec.gov/rules/final/2019/33-10695.pdf</u>, Central Bank of Ireland, Discussion Paper 6 on Exchange Traded Funds (2017), *available at* <u>https://www.centralbank.ie/docs/default-source/publications/discussion-papers/discussion-paper-6/discussion-paper-6---exchange-traded-funds.pdf?sfvrsn=4d1ba61d\_8%20 and Feedback Statement on DP6 - Exchange Traded Funds (2018), *available at* <u>https://www.centralbank.ie/docs/default-source/publications/discussion-paper-6/feedback-statement-on-exchange-traded-funds--discussion-paper-6.pdf?sfvrsn=2, Hong Kong Securities and Futures Commission, Consultation Paper on Proposed Amendments to the Code on Unit Trusts and Mutual Funds (2017), *available at* <u>https://apps.sfc.hk/edistributionWeb/api/consultation/openFile?lang=EN&refNo=17CP8</u> and Consultation Conclusions on Proposed Amendments to the Code on Unit Trusts and Mutual Funds (2018), *available at* <u>https://apps.sfc.hk/edistributionWeb/api/consultation?lang=EN&refNo=17CP8</u>.</u></u>

<sup>7</sup> IOSCO Good Practices Relating to the Implementation of the IOSCO Principles for Exchange Traded Funds (2023), *available at* <u>https://www.iosco.org/library/pubdocs/pdf/IOSCOPD733.pdf</u>.

<sup>8</sup> IOSCO Principles for the Regulation of Exchange Traded Funds (2013), *available at* <u>https://www.iosco.org/library/pubdocs/pdf/IOSCOPD414.pdf.</u>

<sup>9</sup> For example, due to the differences in the ETF distribution model compared to conventional mutual funds, the prospectus delivery requirement was amended in 2016 to mandate that the dealer acting as agent for a purchaser deliver the ETF facts document to the investor who purchased ETF securities over an exchange or alternative trading system, regardless of whether the investor's purchase order is filled with securities newly issued by the ETF.

<sup>&</sup>lt;sup>10</sup> See Canadian Securities Regulators Initiate Review of Exchange-Traded Funds (August 2023), *available at* <u>https://www.securities-administrators.ca/news/canadian-securities-regulators-initiate-review-of-exchange-traded-funds/.</u>

ETF Study, *An Empirical Analysis of Canadian ETF Liquidity and the Effectiveness of the Arbitrage Mechanism* published on June 19, 2025 (the **OSC ETF Study**).<sup>11</sup>

This consultation paper (**Consultation Paper**) outlines our views on potential gaps that may need to be addressed and proposes enhancements to the regulatory framework for ETFs. The proposals consider the IOSCO ETF Good Practices addressed to regulators and how different jurisdictions have implemented the IOSCO ETF Principles that may be appropriate for the Canadian market.

The CSA is publishing the Consultation Paper for a 120 day comment period to gather stakeholder views on the issues and proposals outlined in section III. The proposals primarily impact ETFs and their managers, but also affect investors and their advisors, dealers that provide liquidity for ETFs and listing exchanges. We believe that a regulatory framework tailored to the unique ETF structure can enhance investor protection, promote investor confidence in ETFs, and foster competition. Our proposals aim to ensure that our regulatory framework continues to be appropriate for ETFs in order to support continued growth for the benefit of investors. We encourage stakeholders to provide their views on these proposals and to provide supporting data for their views. We also invite comments on the specific questions set out in the Consultation Paper.

The CSA will consider the feedback on all aspects of the Consultation Paper, particularly the outlined proposals, to assess whether new rules are required to address any identified concerns. If deemed necessary, the CSA will publish proposed requirements for comment through the rule-making process.

The comment period will end on October 17, 2025.

#### II. Background

#### A. Overview of ETF Features

ETFs are unique because their securities can be bought and sold in two markets, the primary market and the secondary market. ETFs offer units on a continuous basis on the primary market and list their securities on an exchange to facilitate secondary market trading. A unique arbitrage mechanism links the two markets. The key features of ETFs are discussed in the subsection below.

#### 1. Unit Creations and Redemptions in the Primary Market

Like conventional mutual funds, ETFs issue securities continuously with no limit on the number of securities that may be issued, and their securities are redeemable at NAV on demand. However, unlike conventional mutual funds, investors cannot transact directly with ETFs. Instead, ETF units may be issued and redeemed only with dealers that have entered into an agreement with the ETF manager. The agreement, typically referred to as a "continuous distribution dealer agreement" (a **CDDA**) by ETF managers and dealers, allows the dealer to buy and redeem ETF units in large blocks at the NAV, which is calculated once a day. The block of units that may be purchased or redeemed is generally termed the "prescribed number of units" in ETF prospectuses, or referred to as a "creation unit" by industry participants. The dealers are typically registered dealers regulated by the Canadian Investment Regulatory

<sup>&</sup>lt;sup>11</sup> See OSC ETF Study, An Empirical Analysis of Canadian ETF Liquidity and the Effectiveness of the Arbitrage Mechanism (2025), available at <u>www.osc.gov.on.ca</u>.

Organization, and they are commonly referred to as "authorized dealers" or "authorized participants" (**APs**). We use the term "AP" in the Consultation Paper.

Creations and redemptions of an ETF's units, known as "primary market" transactions, are restricted to APs. Most investors buy or sell ETF units on a marketplace at prevailing market prices during the trading day, as outlined in subsection II.A.2.<sup>12</sup>

Generally, under the CDDA, an AP can purchase creation units from an ETF by delivering cash, securities in-kind, or a combination of both. Under NI 81-102, the value of cash and/or securities delivered must equal the NAV per unit multiplied by the number of units in the creation unit.<sup>13</sup> For in-kind creations, the ETF manager discloses to the APs in advance a list of securities and any applicable cash balancing amount (the **creation basket**). An AP must deliver the creation basket in exchange for a creation unit.

The redemption process is the reverse. An AP holding enough ETF units to form a creation unit may redeem the units at their NAV.<sup>14</sup> If redemptions are satisfied by the delivery of portfolio securities, the ETF manager specifies in advance the list of securities (with any cash balancing amount) that will be delivered (the **redemption basket**). The ETF manager may have discretion to deliver cash to satisfy redemptions. Some ETFs create or redeem units for cash only. ETF managers may also allow APs to negotiate adjustments to the creation or redemption basket, as discussed in section III.A below.

APs may create or redeem ETF units for their own account, or act as agents to create or redeem units for their clients. APs may hold ETF units that they have created in their inventory or trade the units in the secondary market with other investors; similarly, they can hold the portfolio securities received from a redemption in their inventory or sell them. We understand that a CDDA typically does not require an AP to create or redeem ETF units, and APs are not compensated by the ETF or its manager for creations or redemptions under the agreement.

ETFs may charge an AP a fee for creations or redemptions. Typically, the fee compensates the ETF for the costs related to processing creations and redemptions. A significant difference resulting from the creation and redemption mechanism is that the AP bears all the costs of acquiring or selling securities for the ETF (either through in-kind creations and redemptions or paying a fee for cash creations and redemptions). APs embed these costs in the spread they quote, which investors pay only when they buy or sell the ETF in the secondary market. This means that investors who are not buying or selling are not impacted by the transaction costs associated with money entering or exiting the ETF. In contrast, for conventional mutual funds, when investors enter, the transaction costs incurred for investing their money are borne by the mutual fund (and therefore, shared among the existing investors). The same happens when an investor sells mutual fund securities as the transaction costs for their exit are borne by the fund (and therefore shared among the remaining investors). By including the transaction costs in the

<sup>&</sup>lt;sup>12</sup> Investors that wish to buy and sell large blocks of units (typically institutional investors) may seek to transact at NAV by dealing through APs.

<sup>&</sup>lt;sup>13</sup> See s. 9.3(1) of NI 81-102.

<sup>&</sup>lt;sup>14</sup> While ETF prospectuses disclose that investors that hold sufficient units to form a creation unit have the right to redeem from the ETF, we understand that, practically, only APs redeem units from the ETF. An investor that wishes to redeem from the ETF could do so through an AP acting as agent for the investor.

ETF spread, the ETF structure ensures that these costs are borne by the investors who are buying and selling.<sup>15</sup>

#### 2. Secondary Market Trading

ETFs list their units on an exchange, and ETF investors typically buy and sell ETF units on the secondary market. Investors can buy and sell ETFs using their brokerage accounts, including U.S.-listed ETFs, as ETFs are traded like other exchange-listed securities. Trading of ETF units occurs during market hours at prevailing prices, which may be higher (a **premium**) or lower (a **discount**) than the NAV per unit calculated by the ETF. When trading ETFs, investors incur costs like bid-ask spreads and commissions, similar to trading equity securities.

The co-existence of the primary market and the secondary market gives rise to arbitrage opportunities that help keep the market price of ETF units close to the underlying value of the ETF's portfolio (the **underlying value**). This arbitrage mechanism is central to the ETF structure and is discussed in further detail in the next subsection.

ETFs can be traded like stocks, offering easy access through a marketplace and flexibility to implement various investment strategies. For example, investors can buy ETF units with cash or on margin, or short sell the units. Options trading is available for many ETFs, allowing for various trading and investment strategies. Retail investors typically buy and sell ETF units on a marketplace. Secondary market trading attracts a broad range of participants, making ETFs popular for trading.<sup>16</sup> In addition to investment fund regulations, ETFs are subject to secondary market trading rules, such as rules for best execution and applications of volatility control mechanisms.

Official market makers of ETFs are also subject to applicable exchange rules. Canadian exchanges currently assign one official market maker to each ETF to provide liquidity. Each exchange oversees its market making program and assesses whether the assigned market maker meets performance obligations, which may include meeting minimum spread goals, contributing to liquidity and depth, and maintaining trading activity in the ETF.

Typically, the ETF manager nominates a dealer to act as the official market maker for the ETF on the listing exchange. The ETF manager enters into an agreement referred to as a "designated broker agreement" with this dealer, under which the dealer agrees to act as the designated broker for the ETF.<sup>17</sup> ETF prospectuses generally disclose that the designated broker's duties under the designated broker agreement include: (i) subscribing for sufficient ETF units to satisfy the original listing requirements of the listing exchange; (ii) subscribing for ETF units on an ongoing basis in connection with portfolio transactions and specified cash redemptions; and (iii) posting a liquid two-way market for the trading of the ETF's units on the

<sup>&</sup>lt;sup>15</sup> See Joanne M. Hill, Dave Nadig & Matt Hougan, A Comprehensive Guide to Exchange-Traded Funds (ETFs), CFA Institute Research Foundation (2015), *available at* <u>https://rpc.cfainstitute.org/-/media/documents/book/rf-publication/2015/rf-v2015-n3-1-pdf.pdf</u> (pp.26-27).

<sup>&</sup>lt;sup>16</sup> From 2019 to 2023, Canadian ETF traded volumes have increased from approximately 5% to over 8% of total daily average traded volume of all listed securities; and Canadian ETF traded values have also increased from approximately 9% to over 11% of total daily average traded value of all listed securities. See the OSC ETF Study for further details.

<sup>&</sup>lt;sup>17</sup> We understand that the designated broker typically has the ability to create and redeem ETF units to facilitate its market making obligations, either through entering into a CDDA with the ETF manager or including the ability to create/redeem units in the designated broker agreement.

listing exchange. As the official market maker, the designated broker is overseen by the listing exchange for meeting the parameters of the exchange's market making program.

In addition to the designated broker, APs and other marketplace participants may provide liquidity by posting bids and offers for ETFs throughout the trading day, enhancing liquidity and depth without being obligated to meet exchange requirements for liquidity support. Dealers may seek to act as APs in order to transact directly in the primary market (instead of through an AP); however, a dealer that is providing liquidity need not be an AP, and an AP is not required to provide liquidity. We understand that ETF managers may have informal arrangements or expectations for APs to support the liquidity of their products, as indicated by providing APs with information to value their ETFs. However, there is typically no requirement for liquidity provision in a CDDA.

Under normal circumstances, the bids and offers quoted by the designated broker, APs and other liquidity providers are generally closely tied to the ETF's underlying value because of arbitrage opportunities in the ETF structure.

#### 3. Arbitrage Mechanism

ETFs are marketed as liquid investment products that can be traded intraday on marketplaces at prices close to the underlying value of their portfolio holdings. The tight link of the market price to the underlying value is dependent on the functioning of the arbitrage mechanism.

The ability to create and redeem units in the primary market, along with secondary market trading of ETF units, provides arbitrage opportunities that help keep the market price of ETF units close to the underlying value. For example, if ETF units are trading at a discount on a marketplace, an AP could buy the units on the secondary market and sell or short sell the underlying securities to arbitrage the discount. Once the AP has enough ETF units to form a creation unit, it can redeem them with the ETF in exchange for the underlying securities in the redemption basket. This process can create upward pressure on the ETF unit price or downward pressure on the prices of the securities in the redemption basket, bringing the market price of ETF units closer to the underlying value of the ETF.

Conversely, if ETF units are trading at a premium, the AP could engage in the reverse process. This mechanism, referred to as the "arbitrage mechanism", helps keep the ETF's market price close to its underlying value.

Liquidity providers that are not APs may also engage in arbitrage by creating and redeeming ETF units by placing orders with APs. As well, liquidity providers (including APs) may conduct arbitrage exclusively in the secondary market, rather than through creations/redemptions in the primary market. APs typically have expertise in trading the markets for the ETF's underlying holdings. They are motivated by opportunities to conduct arbitrage and provide liquidity, which allow them to earn profits. This activity by liquidity providers also helps keep the market price of ETF units aligned with their underlying value.

Due to the potential for arbitrage opportunities within the ETF structure, ETF units are generally expected to trade close to their underlying value under normal market conditions. To the extent that significant divergences do occur, these are more likely during periods of market volatility.<sup>18</sup>

<sup>&</sup>lt;sup>18</sup> See OSC ETF Study (pp.16-17).

Effective arbitrage is crucial for enabling investors (who cannot transact directly with the ETF) to buy and sell ETF units on the secondary market at prices that closely track the real-time underlying value of the ETF. We understand that, when designing their products, ETF managers consider whether effective arbitrage can be expected to take place (e.g., the availability of correlated assets and participation of liquidity providers) and whether any characteristics of their proposed product could hinder the arbitrage mechanism, potentially giving rise to undesirable divergences of the market price and the ETF's underlying value.

#### i) Facilitating an Effective Arbitrage Mechanism

#### a) Information to Value the ETF

Disclosing portfolio information for an ETF is associated with facilitating an efficient arbitrage mechanism, leading to narrower premiums/discounts, tighter spreads and better liquidity in an ETF.<sup>19</sup> Information about the ETF's current portfolio holdings or other information to value the ETF's portfolio enables APs and other liquidity providers to: (i) assess the discrepancy between the market price of the ETF's units and their underlying value, and (ii) construct hedges for their positions. Therefore, unlike a conventional mutual fund, which transacts at the daily NAV and does not rely on arbitrage, an ETF's policy for the disclosure of valuation information is central to its operations.

Currently, there are varying industry practices regarding the type of portfolio information that ETF managers disclose to APs and other market participants, as discussed in subsection III.D below. Generally, ETF managers seek to provide sufficient information to facilitate effective arbitrage, ensuring competitive spreads and narrow premiums/discounts to NAV.

#### b) Active Participation of APs and other Liquidity Providers

The IOSCO ETF Good Practices also highlight the importance of active and robust participation by APs and other liquidity providers for effective arbitrage and liquidity provision.<sup>20</sup> ETF managers are encouraged to avoid exclusive arrangements with APs and market makers that may unduly affect the effectiveness of the arbitrage mechanism.<sup>21</sup> Instead, ETF managers are encouraged to promote open and effective competition among APs and other liquidity providers, as competition enhances arbitrage efficiency and creates an active secondary market.

#### c) Other Practices

The IOSCO ETF Good Practices also set out other practices identified by industry participants that could facilitate effective arbitrage. These practices include clear and cost-quantifiable creations and redemptions, enabling custom baskets, having multiple APs available to step in if any particular AP is not able to carry out creations/redemptions for any reason, an open AP architecture to promote competition, widening the availability of APs and market makers if possible, and smaller minimum creation/redemption basket sizes where possible.<sup>22</sup>

<sup>&</sup>lt;sup>19</sup> IOSCO ETF Good Practices (p.23).

<sup>&</sup>lt;sup>20</sup> IOSCO ETF Good Practices (p.31).

<sup>&</sup>lt;sup>21</sup> IOSCO ETF Good Practices (pp.32-33).

<sup>&</sup>lt;sup>22</sup> IOSCO ETF Good Practices (pp.34-35).

#### B. The Canadian ETF Market

As noted above, the analysis of the Canadian ETF market conducted by the OSC's Thought Leadership Division is set out in the OSC ETF Study. The OSC ETF Study includes a summary of the size and composition of the Canadian ETF market, secondary market liquidity, and premiums/discounts to NAV. The OSC ETF Study also analyzes whether (a) the number of APs, and (b) the public disclosure of portfolio holdings, impact bid-ask spreads and deviations from NAV. Stakeholders are encouraged to refer to the OSC ETF Study for details about the findings.

#### III. Topics and Proposals for Consultation

The Consultation Paper focuses on the unique features of the ETF vehicle discussed above. We identify potential gaps and propose and discuss potential enhancements to the existing regulatory framework, with an emphasis on proposals to promote the effective functioning of the arbitrage mechanism that is central to ETFs. Our proposals considered the IOSCO ETF Good Practices (particularly those addressed to regulators) and the different ways that various jurisdictions have implemented the IOSCO ETF Principles presented in the IOSCO ETF Good Practices. We reviewed a sample of ETF prospectuses, focusing on the disclosure about the arrangements implemented by ETF managers to facilitate the arbitrage mechanism for their ETFs and the associated risks. We also reviewed a sample of ETF websites to evaluate the information provided by ETF managers to the public.

The Consultation Paper seeks stakeholder views on our proposals and specific questions, which are organized around the topics set out below. In addition, stakeholders are invited to comment on any aspect of the Consultation Paper, particularly on the costs and benefits of potential measures.

#### A. Policies and Procedures for Creations and Redemptions of Units

APs may create ETF units in the primary market by delivering cash, securities in-kind, or a combination of both. If they have sold short units on the secondary market to meet investor demand for the ETF, they may use the newly created units to close out their short positions. Conversely, APs can redeem ETF units they bought in the secondary market with the ETF in exchange for portfolio securities and/or cash, closing out their long ETF positions. The daily creation and redemption mechanism allows ETF units to be traded in large numbers without significant price deviations from the underlying value. Primary market transactions also help APs limit their risk when providing liquidity for ETFs, encouraging them to actively provide liquidity in the secondary market. An effective primary market is therefore essential for fostering an ETF's liquidity and keeping the market price close to the underlying value, benefiting investors who trade on the secondary market.

Primary market activities may also support efficient ETF portfolio management. For example, creation and redemption baskets may not consist of a pro rata slice of the ETF's portfolio. ETFs can rebalance their portfolios in a cost-effective way by including desired securities in the creation basket and unwanted securities in the redemption basket.

The primary market supports the arbitrage mechanism and could impact the management of an ETF's portfolio, making the orderly creation and redemption of units critical. Therefore, we propose that ETFs be required to establish, maintain and follow written policies and procedures for the creation and redemption of units.

Currently, ETF prospectuses provide certain information about the process for creations and redemptions (e.g., cut-off time for creations and redemptions, and whether cash and/or securities are deliverable), but there is no additional information about the ETF manager's policies for creations and redemptions (such as the methodology for constructing creation and redemption baskets). We understand that many ETF managers have written policies and procedures or internal guidelines and practices for creations and redemptions. The CSA's proposal is intended to formalize these practices, similar to the adoption and implementation of written policies and procedures for other key processes such as fund valuation. Like fund valuation processes, these policies should be approved by the ETF manager's board of directors and be subject to review, testing, and conflict of interest considerations.<sup>23</sup>

ETFs that create and redeem units with in-kind securities may have more complex policies and procedures than ETFs that transact with cash only. These ETFs disclose the composition of the creation and redemption baskets to APs before the opening of trading. We understand that some ETF managers may, at the request of APs, accept or deliver "custom baskets" that have different components than the creation and redemption baskets disclosed before the opening of trading (the **standard baskets**). In the Consultation Paper, we refer to a basket that does not have the same components as the basket disclosed to APs by the ETF before the opening of the trading day as a "custom basket". A custom basket includes a basket that substitutes cash for one or more of the components published in the standard basket.

Using custom baskets can benefit an ETF and its investors. The flexibility provided by custom baskets can lower transaction costs for APs, leading to more efficient arbitrage and tighter bid-ask spreads for ETF units on the exchange. Custom baskets can also encourage more arbitrage activity and improve liquidity for ETF units by allowing APs to use a broader range of their inventory and accommodating their trading constraints. Additionally, custom baskets can help ETFs acquire or dispose of securities in their portfolios efficiently.

However, the use of custom baskets could raise concerns about potential conflicts of interest. For example, an AP affiliated with the ETF manager, or an AP that an ETF (and other ETFs in the same fund family) relies on for maintaining arbitrage, may influence the construction of baskets to their advantage during negotiations for custom baskets.<sup>24</sup> ETF managers have a fiduciary duty to act in the best interests of their ETFs when constructing and accepting/delivering baskets. In addition, we believe that implementing and following specific policies and procedures for using custom baskets would promote consistency in the use of custom baskets, helping to manage potential conflicts of interest and avoid inappropriate differences in how APs create and redeem units with the ETF.

For example, ETF managers may accept cash collateral for creations if an AP experiences delays in delivering components of creation baskets, as discussed in OSC Staff Notice 81-735 *Cash Collateral Use for Delayed Basket Securities in ETF Subscriptions*. Establishing clear parameters for the use of cash collateral and outlining a detailed process for APs to request it would help ensure that all dealers have equal opportunities to use cash collateral, fostering a level playing field for APs.

Given the importance of the primary market, we propose that ETFs be required to implement policies and procedures for creations and redemptions in order to:

<sup>&</sup>lt;sup>23</sup> See Companion Policy to National Instrument 81-106 Investment Fund Continuous Disclosure, s.9.6.

<sup>&</sup>lt;sup>24</sup> See IOSCO ETF Good Practices (p.40), providing examples of potential abuses, including cherry-picking holdings by an AP, or dumping of undesirable holdings by an AP.

- ensure that primary market activities are subject to ETF manager oversight (including compliance oversight), enhancing the robustness of the primary market
- provide a clear and cost-quantifiable creation and redemption mechanism to facilitate arbitrage<sup>25</sup>
- help mitigate potential conflicts of interest
- foster competition among APs by providing a level playing field for APs when dealing with an ETF.

We propose that the policies and procedures for creations and redemptions could include the following elements:

- specify whether the ETF creates and redeems units with cash or in-kind securities (with a cash amount balancing to NAV)
- if an ETF that creates and redeems units with in-kind securities may, on an exceptional basis, permit cash creations and redemptions, set out the process for an AP to request cash creations or redemptions, and the parameters for permitting cash transactions<sup>26</sup>
- specify the size of a "manager-prescribed number of units" (as defined in NI 81-102)
- specify the fees (if any) charged for processing a creation and redemption
- set out the methodology governing the construction of the basket for creations and the basket for redemptions<sup>27</sup>
- if the ETF permits the use of custom baskets, set out:
  - the process for an AP to request a custom basket and the parameters for the construction of custom baskets, including the process for allowing deviations from those parameters (if any)
  - the procedures for the ETF manager to review and test whether the custom baskets used were in the best interests of the ETF
- if the ETF accepts cash collateral for creations, set out the parameters for the use of cash collateral and the process for an AP to request the use of cash collateral
- specify the process and procedures to be followed for accepting creation baskets and delivering redemption baskets.<sup>28</sup>

We believe the proposed requirements would provide ETFs with the flexibility to implement policies and procedures that are appropriate for their creations and redemptions. For example, ETFs that transact using cash only may have simpler policies and procedures compared to those that use in-kind creations and redemptions. ETFs that allow custom baskets with only limited deviations permitted from the standard basket may have less detailed parameters. If policies and procedures for creations and redemptions are implemented, ETF managers would be required to maintain records to demonstrate compliance with such policies and procedures in accordance with section 11.5(2)(e) of National Instrument 31-103 *Registration Requirements, Exemptions and Ongoing Registrant Obligations*.

<sup>&</sup>lt;sup>25</sup> See subsection II.A.3(i)(c) above.

<sup>&</sup>lt;sup>26</sup> For example, the ETF may permit no more than a certain amount of cash creations over a specified period.

<sup>&</sup>lt;sup>27</sup> For example, an ETF that transacts in-kind may construct baskets that consist of a *pro rata* slice of its holdings, or an optimized sample of its holdings.

<sup>&</sup>lt;sup>28</sup> This proposed element would include specifying the cut-off time for submitting purchase and redemption orders.

#### Consultation Questions:

- 1. Are any of the proposed elements for the proposed policies and procedures for the creation and redemption of units unnecessary or not useful? Are there additional elements that should be included in these policies and procedures?
- 2. We did not propose that the policies and procedures for creations and redemptions be disclosed to the public since: (a) investors do not transact in the primary market and therefore may not require details about basket construction, and (b) the efficiency and potential risks of the primary market mechanism would be reflected in the key metrics we propose be disclosed on the ETF's website, as outlined in subsection III.B.1. However, are there specific elements of the policies and procedures (e.g., whether the ETF's creation and redemption baskets consist of a pro rata slice of the portfolio or an optimized sample, whether the ETF creates and redeems with in-kind securities or with cash, whether the ETF permits custom baskets, etc.) that should be disclosed in the prospectus to provide investors with useful information about the primary market mechanism for the ETF and potential risks?

#### B. Secondary Market Trading

#### 1. Website Disclosure of Metrics

National Instrument 81-106 *Investment Fund Continuous Disclosure* (**NI 81-106**) requires each investment fund to designate a qualifying website for posting disclosure required by securities legislation. A designated website helps improve investor access to information. In addition to posting regulatory documents, ETF managers often use their websites to provide current information, including information on the ETF's performance and portfolio.

The sample of ETF websites we reviewed showed that ETFs provide daily trading and pricing information on their websites, including the daily NAV per unit, closing price<sup>29</sup>, bid-ask spread, and percentage discount/premium. This information is also available for historical periods on the website (e.g., past 12-month data). We believe this information is useful for investors, as it helps them understand that the price of ETF units on the secondary market can differ from the NAV and enables them to assess potential trading costs, which are part of the total costs of investing in an ETF.

The CSA proposes that ETFs be required to disclose up-to-date information on their website about the functioning of the arbitrage mechanism and secondary market trading in an accessible format, to help investors evaluate their investment and trading decisions. Our website disclosure proposals aim to:

- *improve investor understanding of the features of the ETF* metrics help investors assess the functioning of arbitrage and understand the impact of premiums/discounts and quoted spreads on their investments
- *enhance transparency* daily updates offer more up-to-date information than available in the ETF facts document
- *facilitate comparisons* standardized information and consistent time periods for disclosures facilitate better comparisons among ETFs.

<sup>&</sup>lt;sup>29</sup> The ETF websites reviewed used terms such as "market price", "closing price" or "closing market price" for comparison against NAV.

Currently, information about the market price and the NAV of an ETF's units is available in the ETF facts document under the "Pricing Information" heading. ETFs must disclose the range of the market price and NAV over a 12-month period ending within 60 days of the date of the ETF facts document for each class (or series) of securities offered.<sup>30</sup> The average bid-ask spread over the same period, calculated using the methodology set out in Form 41-101F4 *Information Required in an ETF Facts Document* (Form 41-101F4), must also be disclosed.<sup>31</sup> However, this information is not required to be updated frequently as the ETF facts document is filed annually.<sup>32</sup> Also, ETFs do not all provide this information for the same time period in their ETF facts document due to different prospectus filing dates, making it more difficult for investors to compare ETFs.

We propose that ETFs provide key metrics on their website that are similar to the pricing information currently provided in the ETF facts document, with daily updates. We contemplate the metrics being disclosed in an easily accessible section of the ETF's website, under the proposed heading "Trading and Pricing Information", and presented in a clear and readable format. The key metrics we propose are daily and historical premiums/discounts to NAV for standardized periods, and median quoted spreads for the most recent 30-day period.

Premiums and discounts are impacted by many factors. Some categories of ETFs may have premiums and discounts that are larger, such as ETFs that hold foreign securities where the foreign markets are closed during the trading day for the ETF's securities. Disclosure related to premiums and discounts can help investors understand that some types of ETFs may have relatively larger premiums or discounts, and help investors compare ETFs within a category, as well as provide useful information about the efficiency of the arbitrage mechanism. ETFs may also discuss the factors that contribute to premiums and discounts to provide investors with relevant context. Presenting quoted spreads for a more recent period would provide investors with more up-to-date information about the liquidity costs associated with an investment in an ETF.

We propose that an ETF disclose the following metrics on its designated website for each series (or class) of securities offered:<sup>33</sup>

### (a) the net asset value per security, the closing price, and premium or discount, each as of the prior business day;

We propose that the "premium or discount" be defined as: the difference (positive or negative) between the "closing price" of the ETF's security (as proposed to be defined below) and the ETF's most recent net asset value per security, expressed as a percentage of the net asset value per security.

We propose that, for the purposes of enhancing investor understanding of the differences of the secondary market value of an ETF's security and the NAV, the "closing price" be represented by

<sup>&</sup>lt;sup>30</sup> See Item 2(3), Part I of Form 41-101F4 and Instructions (12) and (13) thereunder.

<sup>&</sup>lt;sup>31</sup>See Item 2(3), Part I of Form 41-101F4 and Instruction (14) thereunder.

<sup>&</sup>lt;sup>32</sup> The ETF facts document must be amended, however, if a material change that affects the information disclosed in the document occurs.

<sup>&</sup>lt;sup>33</sup> The proposed metrics and presentation are similar to that required to be disclosed by U.S. ETFs pursuant to SEC Rule 6c-11 under the *Investment Company Act of 1940*, which were presented as an example of disclosures regarding arbitrage and secondary market trading in the IOSCO ETF Good Practices (p. 44).

the calculated closing price published by the listing exchange for the ETF. <sup>34</sup> Listing exchanges have defined the closing price in their respective trading rules and have published their methodologies to determine a calculated closing price for ETFs, addressing stale last sale prices for ETFs that are not frequently traded.

As some ETFs do not calculate their NAV as of the close of trading at 4 p.m., we propose that such ETFs use the price that is the midpoint between the best bid and best offer on its listing exchange as of their NAV calculation time if that price better reflects the secondary market value of the ETF's securities at such time. Therefore, we propose that "closing price" mean: (i) the closing price of a security of the ETF published by the exchange on which the securities of the ETF are listed (the **Listing Exchange**); or (ii) if the ETF does not calculate NAV as of the closing time of its Listing Exchange, the price that is the midpoint between the best bid and best offer on the Listing Exchange as of the time the ETF calculates its NAV.

This proposed daily disclosure would provide a snapshot of the difference between the NAV and the closing price on a daily basis. While this daily snapshot reflects the difference at a single point in time and may not capture intraday fluctuations, we believe it strikes a reasonable balance given the costs and practical challenges of calculating intraday deviations.

# (b) a table showing the percentage of trading days the securities traded at a premium or discount during the most recently completed calendar year and the completed calendar quarters since that year (or the life of the ETF, if shorter);

This proposed table would present a summary of the portion of trading days that the closing price of the ETF's securities was at a premium, discount, or equal to the NAV over the most recent full year period and subsequent quarterly periods, making it easier for investors to understand and absorb historical information.

# (c) a line graph showing premiums or discounts for the most recently completed calendar year and the completed calendar quarters since that year (or the life of the ETF, if shorter);

This proposed line graph would provide a visual representation of the degree of the premiums or discounts, and highlight any relatively large deviations, helping investors assess the stability of the premiums or discounts.

(d) if the premium or discount of any class or series of securities offered is greater than 2% for more than seven consecutive business days, include a statement before the opening of trading on the ETF's listing exchange on the next business day of the applicable consecutive period, that the ETF's premium or discount, as applicable, was greater than 2% for more than seven consecutive business days, and include a discussion of the factors that are reasonably believed to have materially contributed to the premium or discount. This disclosure must be maintained on the website for at least one year.

<sup>&</sup>lt;sup>34</sup> See the approvals granted for exchange rules and policies regarding the dissemination of calculated closing prices that may be based on bid-ask spreads near the close of trading to better reflect secondary market values of ETFs, particularly for ETFs that are not frequently traded:

https://www.osc.ca/en/industry/market-regulation/marketplaces/exchanges/recognized-exchanges/tmx-group-inc-andtsx-inc-rule-review-notices/notice-approval-tsx-closing and https://www.osc.ca/en/industry/marketregulation/marketplaces/exchanges/recognized-exchanges/neo-exchange-inc-rule-review-notices/notice-approvalamendments-trading.

This proposed disclosure seeks to increase investor awareness about ETFs that have significant and persistent deviations from NAV, which may occur when the arbitrage mechanism is impaired. We propose including a discussion of factors that are reasonably believed to have contributed to the deviations to give investors insight into the historical efficiency of the ETF's arbitrage mechanism. This insight is intended to help investors make more informed decisions, such as comparing ETFs within a specific category. Additionally, maintaining this information on the website for at least a year will help identify ETFs with a history of significant and persistent differences between closing price and NAV per security.

The OSC ETF Study found that during the period 2019-2023, the average deviation between the closing price and NAV across ETFs with different underlying assets and strategies has been relatively small. We sought to establish a threshold that would highlight larger, persistent deviations from NAV, and considered an alternative threshold of 2 standard deviations or more over the past rolling 12 months for a period of more than 7 consecutive business days. We found that the 2 standard deviation threshold would have resulted in a higher percentage of ETFs that would have triggered such disclosure during each year in the 2020-2023 period.<sup>35</sup> While this alternative threshold represents the unique deviations of each ETF and captures the most recent market behaviour, it may be more complex to calculate and implement. We are proposing a 2% threshold to simplify implementation and disclosure and seek feedback on this threshold.

(e) the median bid-ask spread, expressed as a percentage rounded to the nearest hundredth, over the most recent 30 calendar days. This measure would be computed as follows:

(A) calculate the "Interval Bid-Ask Spread" for each "Interval Point" in each trading day over the previous 30 calendar days, using the methodology required under Form 41-101F4 for the calculation of Interval Bid-Ask Spreads in determining the "Average Bid-Ask Spread"<sup>36</sup>, and

#### (B) identify the median of the Interval Bid-Ask Spreads.

If an ETF does not have Interval Bid-Ask Spreads for at least 75% of the Interval Points in the previous 30 calendar days, we propose that it state "This ETF did not have sufficient market depth (\$50,000) to calculate the median bid-ask spread for the previous 30 calendar days." If an ETF has not traded for more than 30 calendar days, we propose that the ETF include the following statement: "This ETF has not traded for more than 30 calendar days."

The proposed median bid-ask spread would provide investors with more up-to-date information about the potential costs of investing in ETFs, enhancing cost transparency and comparability among similar ETFs. We propose that the calculation of this measure use the same elements as that required for the calculation of the historical Average Bid-Ask Spread in the ETF facts

<sup>&</sup>lt;sup>35</sup> Based on OSC staff analysis, a 2% threshold would have triggered disclosure for 5.3%, 0.7%, 0.6%, and 1.1% of the total sample of ETFs annually from 2020 to 2023. In comparison, the 2 standard deviation threshold would have triggered disclosure for 18.5%, 3.0%, 6.6%, and 5.2% of the total sample of ETFs annually over the same period. The majority of the additional ETFs that would have disclosed under the 2 standard deviation threshold are fixed income ETFs.

<sup>&</sup>lt;sup>36</sup> See Instruction (14) under Item 2(3), Part I of Form 41-101F4 for the calculation of the Average Bid-Ask Spread and the Interval Bid-Ask Spread.

document, so that ETFs would not be required to obtain and calculate new inputs for a median over a rolling period.

The OSC ETF Study observed that average quoted spreads are typically narrow.<sup>37</sup> However, spreads can widen due to various factors, such as the market volatility experienced in March-April 2020. Information on bid-ask spreads over the past 30 calendar days could enable investors to compare the costs on their intended trading day with recent average spreads, helping them make more informed decisions.

ETF managers may currently monitor other metrics to assess the functioning of the arbitrage mechanism and the liquidity of their ETFs. In addition to the standardized metrics proposed, ETFs may disclose other metrics on their website (with an explanation of the significance of the metrics) as long as the proposed metrics are presented with equal prominence. The website disclosure proposals may lead ETF managers to develop tailored metrics for different types of ETFs and could encourage service providers to develop commercial solutions that facilitate the comparison of trading metrics for different ETFs.

#### Changes to ETF Facts Document

We propose that the ETF facts document be amended to include a reference to the ETF's website for investors to access the metrics proposed above. We also seek feedback on providing premium/discount information in the ETF facts document.

#### **Consultation Questions:**

- 3. Does the proposed term "closing price" and the proposed definition of this term appropriately represent the secondary market value of an ETF's security? If not, what definition would better reflect the secondary market value of an ETF's security (e.g., a definition that references the national best bid and offer instead of the best bid and offer on the listing exchange) and what term would be better?
- 4. For ETFs that do not calculate NAV as of the closing time of the listing exchange, would using the value that is the midpoint between the best bid and best offer on the listing exchange as of the time of NAV calculation appropriately represent the secondary market value of the securities of such ETFs? Is the term "closing price" appropriate for such ETFs? If not, what term would be more suitable?
- 5. Is the 2% premium/discount threshold appropriate to help identify ETFs that present significant deviations from NAV over a period of more than seven consecutive business days?
- 6. We observed from ETF websites that many ETFs offer downloadable daily NAV per security and closing price data over historical periods (such as for the period since inception). In addition to presenting historical premiums/discounts in a line graph as proposed, would it be beneficial to require ETFs to make their daily NAV per security, closing price, and premium/discount data for the past two calendar years available for download?
- 7. Are there alternative metrics or data presentations to those proposed that would help investors assess the functioning of the ETF's arbitrage mechanism and the liquidity of the ETF's securities on the secondary market? Would daily average bid-ask spreads over the

<sup>&</sup>lt;sup>37</sup> See OSC ETF Study (p.13).

same historical periods proposed for premiums and discounts in subsection (c) be useful for investors, in addition to the 30-day median bid-ask spread proposed?

- 8. To what extent would the proposed website disclosure requirements increase costs for ETFs, taking into consideration the pricing information that is currently required in the ETF facts document? Please provide additional costs beyond the costs of providing the information currently required in the ETF facts document (e.g., initial set-up costs, on-going data costs, etc.).
- 9. Should the ETF facts document include information about premiums/discounts in the "Pricing Information" table, such as including the mean of the daily premiums/discounts over the 12-month period ending within 60 days of the date of the ETF facts document? What other measure would provide representative information about historical premiums/discounts?

#### 2. Monitoring of Arbitrage and Liquidity Provision

The expectation that an ETF's market price will closely align with its underlying value relies on APs and other liquidity providers taking advantage of arbitrage opportunities to correct price differences. The effective operation of this arbitrage mechanism is critical for the proper functioning of ETFs. The listing exchange monitors the official market maker to assess the quality of liquidity provision and verify dealer adherence to market making program parameters that make them eligible for benefits, such as rebates. In addition to this monitoring by the exchange, we understand that:

- to meet investor expectations and remain competitive, ETF managers aim to design products and establish arrangements that support effective arbitrage (such as constructing baskets with liquid components), reducing the likelihood of significant divergence between the market price of ETF units and their underlying value
- ETFs are dependent on arbitrageurs, and particularly APs as they can create and redeem units with the ETF, to minimize deviations from the underlying value of their units. ETF managers seek to have a group of arbitrageurs that are ready to act on arbitrage opportunities. ETF managers typically select the designated broker and APs based on their capabilities in market making, and conduct due diligence in this regard. The designated broker agreement usually specifies that one of the duties of the designated broker includes posting a liquid two-way market for the ETF. In addition, even though not formalized in a written agreement, ETF managers typically have expectations or arrangements for liquidity provision by APs or a subset of APs, as they frequently provide portfolio holdings information to APs for the purposes of facilitating liquidity provision and arbitrage, as discussed in subsection III.D
- ETF managers may monitor closing prices to assess their alignment with NAV. They also monitor liquidity metrics such as quoted spreads and market depth to ensure that the spreads reflect the spreads of the ETF's portfolio holdings and are within expected values
- when ETF managers observe secondary market trading behaviour that deviates from their expectations, such as widening spreads, they typically address the matter with the relevant AP(s).

Consistent with the IOSCO ETF Good Practices, which encourage ETF managers to monitor APs and market makers on an ongoing basis to ensure that they contribute to the functioning of

the arbitrage mechanism and liquidity provision,<sup>38</sup> we propose to introduce requirements for ETF managers to:

- monitor the functioning of the arbitrage mechanism and liquidity provision on the secondary market (including designated broker and AP participation in this regard); and
- (ii) establish, maintain and follow policies and procedures for their monitoring, to ensure consistent monitoring and oversight of the functioning of arbitrage and liquidity.

Under this proposal, an ETF manager would monitor and assess the effectiveness of arbitrage and liquidity provision for their ETF. This oversight would help verify that the manager's arrangements to facilitate arbitrage serve to maintain secondary market trading at prices that are aligned with the ETF's underlying value. In addition, we contemplate that the ETF manager would specifically monitor arbitrage and liquidity provision by APs and any dealers with whom they made arrangements for liquidity provision (whether formal or informal). This oversight will also enable ETF managers to take appropriate action if quotations and trading do not reflect their expectations based on their design of the ETF, including the arrangements they established to facilitate arbitrage.<sup>39</sup>

We propose that the policies and procedures:

- (i) set out the ETF manager's process for assessing the effectiveness of arbitrage and liquidity provision on the secondary market. This would include processes to monitor the participation of the designated broker and APs (and any other dealers with whom the ETF manager has made arrangements for liquidity provision) and whether their activity is consistent with the arrangements for liquidity provision and arbitrage made between each dealer and the ETF manager, and
- (ii) specify the metrics that the ETF manager monitors for assessing arbitrage effectiveness and liquidity, and include parameters for the metrics. The metrics would include the daily premium/discount to NAV and daily bid-ask spread.

We believe that our proposal offers ETF managers flexibility to use different means for monitoring. For example, ETF managers may monitor based on real-time data or periodic reviews of secondary market activity, with sufficient frequency to ensure effective oversight. ETF managers may have different internal methodologies to assess arbitrage and liquidity. ETF managers may seek to understand the liquidity provision processes of the designated broker and APs to ensure effective monitoring. The proposal in paragraph (ii) above would require the policies and procedures to specify:

(a) any metrics that the ETF manager monitors in addition to daily premiums/discounts to NAV and daily bid-ask spreads, such as market depth, AP participation in daily continuous trading, or any intraday comparisons of market price and the ETF's underlying value, and

(b) specific parameters for the metrics. Parameters may consist of relative measures based on comparisons with ETFs in the same category or expected value ranges, having regard to the ETF's arrangements with APs for conducting arbitrage and providing liquidity, the ETF's

<sup>&</sup>lt;sup>38</sup> IOSCO ETF Good Practices (pp.31-32).

<sup>&</sup>lt;sup>39</sup> IOSCO ETF Good Practices (p.101).

investment objectives and strategies (incorporating historical ranges for the market segments the ETF invests in), NAV calculation policies and other factors that may affect arbitrage.

Metrics falling outside the ETF manager's parameters consistently would warrant consideration of whether adjustments should be made to the ETF (such as its AP arrangements) to ensure close alignment of the market price to the underlying value.

#### **Consultation Questions:**

- 10. Does the proposed policies and procedures requirement offer sufficient flexibility for ETF manager monitoring?
- 11. Should the policies and procedures include other specific metrics that should be monitored? In addition to bid-ask spreads and premiums/discounts to NAV, what metrics should be required to be monitored?
- 12. Do ETF managers make arrangements for liquidity provision with dealers that are not APs?
- 13. Would disclosing the ETF manager's parameters on the ETF's website provide context for investors and help them evaluate the trading information proposed to be disclosed on the ETF's website under subsection III.B.1?

#### C. AP Arrangements

As discussed above in subsection II.A.1, APs have a crucial role in the operation of ETFs. They are the only market participants that are authorized by the ETF manager to create and redeem units with the ETF, which allows them to adjust the supply of ETF units in response to market demand. A robust primary market which allows for the effective creation and redemption of units is important for effective arbitrage. In addition to their role in the primary market, APs are typically also important liquidity providers for ETFs on the secondary market.

#### 1. Disclosure of AP Arrangements

APs are important for the functioning of ETFs, but there is currently little information about an ETF's arrangements with its APs. ETF prospectuses typically disclose that only authorized dealers who have entered into an agreement with the ETF manager to create or redeem units may do so. ETFs do not disclose the identity of their APs in the prospectus. As discussed in subsection II.A.1, APs usually enter into an agreement referred to as a CDDA with the ETF manager. Currently, ETFs do not file a CDDA as a "material contract" (as defined in National Instrument 41-101 *General Prospectus Requirements* (**NI 41-101**)) under s.9.3(1) of NI 41-101, and the terms of the CDDA are not disclosed in the prospectus. Due to this information gap, investors may be unaware of the terms and risks associated with AP arrangements; for example, how many APs the ETF has, and whether the AP group is diverse with APs having varying costs and constraints, or whether the AP group is relatively homogenous.<sup>40</sup>

<sup>&</sup>lt;sup>40</sup> See, for example, Evgenii Gorbatikov and Taisiya Sikorskaya, Two APs are Better Than One: ETF Mispricing and Primary Market Participation (May 2022), *available at* 

<sup>&</sup>lt;u>https://papers.ssrn.com/sol3/papers.cfm?abstract\_id=3923503</u>, discussing the relationship between the level of mispricing in US equity ETFs and the ETF's AP network diversity.

Given the important role of APs, we propose that ETFs provide transparency regarding their arrangements with dealers to act as APs. First, we propose that an ETF be required to enter into a written agreement with each dealer it authorizes to create and redeem ETF securities. We also contemplate introducing a definition of "authorized participant" in NI 81-102 as follows: an "authorized participant" means "a dealer that has entered into a written agreement with the ETF that allows the dealer to purchase and redeem a manager-prescribed number of units of the ETF". These proposals aim to identify the entities eligible to transact directly with the ETF in the primary market and clarify which entities our proposals concerning the ETF's arrangements with its AP(s) apply to.<sup>41</sup>

Second, we propose that an agreement between an AP and the ETF regarding the creation and redemption of ETF units be enumerated in the list of documents that are required to be filed with a prospectus under s.9.1(1)(a)(iv) of NI 41-101. The agreement would also be listed under the "Material Contracts" heading in the prospectus of the ETF, with particulars of the contract disclosed in the prospectus.<sup>42</sup> We understand that the designated broker typically has the ability to purchase and redeem units of the ETF to fulfil periodic cash subscription requests by the ETF manager and to support their market making activities, in addition to its duty to make a liquid market for the ETF. Given this, we believe that a designated broker also fits the proposed definition of "authorized participant". Therefore, an agreement between the designated broker and the ETF manager would be a "material contract" as proposed. As a result, when providing particulars of the designated broker agreement, key terms (including any liquidity provision obligations) must be disclosed.

We believe that transparency regarding an ETF's arrangements with its APs is important. For example, the affiliation of an AP with the ETF manager may influence investor expectations regarding the level of liquidity support that would be provided by the affiliated AP, even though there is no contractual obligation. Disclosing the key terms of AP agreements would help investors better understand the substance of an ETF's arrangements with its APs.

#### **Consultation Questions:**

- 14. Is information regarding an ETF's arrangements with its APs important for an investor's evaluation of an ETF? If not, why not?
- 15. Would the proposal to include each agreement to act as an AP for the ETF as a document required to be filed with the prospectus and listed under the "Material Contracts" heading in the prospectus provide investors with useful information about the ETF's arrangements with its APs? Are there other means of providing information regarding the ETF's arrangements with its APs?
- 16. Should an ETF's agreement with its designated broker be required to be filed with the ETF's prospectus as a required document under s.9.1(1)(a)(iv) of NI 41-101 and disclosed under Item 31 (Material Contracts) of Form 41-101F2 *Information Required in an Investment Fund Prospectus*?

<sup>&</sup>lt;sup>41</sup> As discussed under subsection II.A.1, currently, a dealer that seeks to act as AP typically enters into a CDDA with the ETF or its manager. We do not expect that this proposal will involve any change to existing CDDAs, as a CDDA would be a written agreement that allows the dealer to purchase and redeem a manager-prescribed number of units of the ETF.

<sup>&</sup>lt;sup>42</sup> See Item 31 of Form 41-101F2 *Information Required in an Investment Fund Prospectus* (including the accompanying Instructions thereunder) and section 9.3 of NI 41-101.

#### 2. Information Provided to APs Equally

Given the benefits of competition outlined in subsection II.A.3, the CSA considered ways to create a level playing field for APs in their arrangements with ETFs to encourage active participation and foster competition among them. We propose that ETF managers be required to provide the same information to facilitate liquidity provision and arbitrage to all APs at the same time and under the same conditions. This includes any information needed to determine the ETF's underlying value (such as portfolio holdings information) and information for the creation and redemption of units. If the ETF manager imposes restrictions on the use of this information, those restrictions must apply equally to all APs.

#### **Consultation Question:**

17. Do ETF managers provide information to determine the ETF's underlying value and information for the creation and redemption of units to market participants other than APs (i.e., market participants that do not have a written agreement that authorizes them to create and redeem units) in order to foster a more diverse pool of potential arbitrageurs? If an ETF manager enters into agreements or arrangements with such other market participants, should the ETF manager also provide these participants with the same information for conducting arbitrage as is provided to APs, even though they are not authorized to create or redeem units?

#### 3. Minimum Number of APs

As discussed in subsection II.A.3, having multiple APs supports an effective arbitrage mechanism. Having multiple APs could:

- reduce concentration risk a robust creation and redemption mechanism is critical for arbitrage. Onboarding multiple APs that are available to deal in the ETF's units reduces the risk of not having any AP available to create and redeem units. During volatile market conditions, having a diverse set of APs with different risk appetites and constraints would also increase the likelihood that at least one AP will continue to maintain arbitrage
- *increase the potential for competition* arranging for multiple APs to provide liquidity creates a competitive environment, helping to keep the market price of ETF units close to their underlying value.

The OSC ETF Study found that most ETFs have multiple APs. ETF managers typically contract with the same group of APs for all of their ETFs, but we understand that not all APs regularly provide liquidity or create/redeem units for every ETF in the fund family.<sup>43</sup> Even though APs are not obligated to act in the primary or secondary market, most ETF managers seek multiple APs for their ETFs. As of December 2023, 71 ETFs (managed by 5 ETF managers), representing 8% of total ETFs, have only one AP.<sup>44</sup>

We considered whether ETFs should be required to have a minimum number of APs and what that minimum would be. Key considerations included:

<sup>&</sup>lt;sup>43</sup> For example, an AP may choose to be active only in relation to ETFs that invest in markets where the AP has particular expertise.

<sup>&</sup>lt;sup>44</sup> See OSC ETF Study (pp.8-9).

- APs are generally not obligated to conduct arbitrage or provide liquidity within specified parameters. AP activity is dependent on the demand for the ETF, and adding more APs may not proportionally increase the benefits discussed above
- the OSC ETF Study found no relationship between the number of APs and bid-ask spreads, but there was some evidence that having more APs is correlated with smaller deviations from NAV for certain periods covered by the research.<sup>45</sup>

Given these considerations, it was not clear if a specific minimum number of APs would promote efficient arbitrage. Similarly, a specified number of APs may still pose concentration risks for some ETFs if there is no AP obligation to conduct arbitrage under all market conditions, including stressed conditions. Therefore, we focused on ETFs with one AP, as they could raise concerns about undue concentration risk and absence of competition in arbitrage and liquidity provision.

Despite AP activity depending on ETF demand and a second AP that may not always act regularly, we believe it could be beneficial for ETFs to avoid sole AP arrangements and contract with at least two APs for the following reasons:

- increasing primary market resiliency relying on a single AP could be unduly risky. During times of market stress, an unexpected shock to an AP could render it unavailable to participate in the primary market. A second AP could increase the resiliency of the primary market, as there would be no delay in onboarding another AP if the first AP is unable to create or redeem units (i.e., there would be a second AP that has passed the ETF's due diligence review and can step in and transact readily)
- promoting competitive behaviour the presence of a second AP, already onboarded by the ETF manager and capable of making markets for the ETF, could encourage the first AP to maintain tight bid-ask spreads and closely track the underlying value of the ETF to avoid losing trades. Promoting competitive behaviour may be particularly important for ETFs that do not publicly disclose portfolio information for arbitrage.<sup>46</sup> Without access to portfolio information, it may be difficult and less likely for informal liquidity providers (who do not have an agreement with the ETF) to compete in market making, raising concerns about a sole AP having an information advantage (see the discussion in section III.D below)
- avoiding exclusive arrangements it is unclear whether the ETFs that have one AP have exclusive arrangements with one dealer. The IOSCO ETF Good Practices encourage avoiding exclusive arrangements if they may unduly affect the effectiveness

<sup>&</sup>lt;sup>45</sup> See OSC ETF Study (pp.3 and 23).

<sup>&</sup>lt;sup>46</sup> ETF managers have expressed the view that multiple AP arrangements reduce the possibility of APs unfairly benefitting from the portfolio holdings information that is disclosed only to APs, because competition for trades among the APs would narrow the quoted spread on the ETF's securities and bring the market price of the ETF's securities in line with their underlying value. See OSC Investment Funds Practitioner – *Portfolio Disclosure Practices of Exchange-Traded Funds* (December 2016), *available at* <u>https://www.osc.ca/en/industry/investment-funds-and-structured-products/ifsp-enews/portfolio-disclosure-practices-exchange-traded-funds</u> (**OSC IF Practitioner**).

of the arbitrage mechanism.<sup>47</sup> Contracting with at least two APs ensures that there is no de facto exclusive arrangement that may impact arbitrage effectiveness.

While having two APs may still pose concentration risks, a two AP minimum could alleviate concerns regarding exclusive arrangements. However, newly launched ETFs with lower asset levels or ETFs investing in assets that trade in specialized markets may encounter challenges in contracting with a second AP, potentially hindering the introduction of innovative funds. We seek feedback to better understand the benefits and disadvantages of an ETF having at least two APs.

#### Consultation Questions:

- 18. Does having only one AP pose undue risk for the primary market? Are there obstacles for ETFs to contract with at least two APs?
- 19. Would the presence of a second AP (and therefore, the potential for competition) help mitigate concerns associated with a single AP potentially not maintaining efficient arbitrage to align the market price of the ETF closely to the underlying value? Is this concern more significant for ETFs that do not disclose daily portfolio information to the public, making it less likely for non-AP dealers to provide liquidity? Are there other ways for the ETF manager to ensure that a sole AP maintains efficient arbitrage?
- 20. If an ETF has only one AP due to specific obstacles in contracting with more APs, should exclusive arrangements with the AP be prohibited, thereby making it possible for the ETF to contract with additional APs once the obstacles do not exist? What benefits would an exclusive arrangement (or de facto exclusive arrangement) provide for the ETF and its investors that would outweigh the risks of limiting primary market access (and potentially, liquidity provision, for certain ETFs) to only one AP?
- 21. If an ETF only has one AP, should the name of the AP be prominently disclosed in the prospectus or ETF facts document, for example, under Items 14 (Purchases) and 15 (Redemptions) of Form 41-101F2 and under Item 2, Part I of Form 41-101F4 (Quick Facts table), to inform investors of the ETF's reliance on the sole AP?

#### D. Disclosure of Portfolio Information for Arbitrage and to the Public

As outlined in subsection II.C, APs and other liquidity providers use information about the ETF's portfolio to value an ETF (**valuation information**) to identify arbitrage opportunities and to construct hedges for their market positions. Without sufficient information about the ETF's portfolio to allow APs to quantify the risks of their positions in the ETF and to hedge efficiently, APs may widen bid-ask spreads or require a larger difference between the market price of ETF units and the underlying value before engaging in arbitrage.

Generally, daily public disclosure of full portfolio holdings is associated with facilitating robust arbitrage, enabling APs and other liquidity providers to value the ETF's portfolio holdings continuously and thereby identify arbitrage opportunities, and construct efficient hedges.<sup>48</sup> This practice also makes the same information available to all ETF investors and market participants.

<sup>&</sup>lt;sup>47</sup> See IOSCO ETF Good Practices (p.33).

<sup>&</sup>lt;sup>48</sup> IOSCO ETF Good Practices (p.23).

However, managers of active ETFs<sup>49</sup> may be concerned that public disclosure of full daily holdings could allow others to discern their proprietary investment strategies and reverse engineer their strategies, free-riding on their investment research. As well, some ETF managers (including managers of index-based ETFs) are concerned that other market participants that can see what their ETF is buying or selling daily can anticipate their trades and trade ahead of the ETF (similar to frontrunning),<sup>50</sup> reducing investment returns.

In this subsection, we discuss: (a) whether an ETF should be required to provide specific valuation information to facilitate arbitrage; and (b) whether an ETF should be required to make the valuation information available to all market participants for the trading day by disclosing the information on its website. We also discuss our proposal for ETFs to clarify the information they disclose for arbitrage and the information they disclose to the public on their websites.

#### 1. Type of Valuation Information

While all ETF managers seek to facilitate arbitrage, ETF managers currently provide varying levels of portfolio information. This can include full daily portfolio holdings or the component securities that make up the creation and redemption baskets.<sup>51</sup> We considered whether it was necessary to prescribe the type of valuation information to facilitate arbitrage and concluded that no requirement is necessary, because:

- ETF managers have a strong interest in providing sufficient valuation information to facilitate effective arbitrage. Without it, APs would be less willing to participate actively in market making as they face higher risks and uncertainties. An ETF would likely exhibit wider bid-ask spreads or larger divergence from NAV compared to its peers, making it less attractive to investors. The OSC ETF Study, which included a review of the quoted spreads and deviations from NAV of ETFs from 2020-2023, found that overall, spreads were low and average deviations from NAV were small,<sup>52</sup> suggesting that ETF managers have effectively determined the necessary information to facilitate effective arbitrage despite the absence of mandated valuation information for arbitrage
- investors will be able to assess the functioning of the arbitrage mechanism and compare across ETFs under our proposal in subsection III.B.1 for an ETF to disclose certain metrics on its website. Further, ETF managers must monitor the effectiveness of arbitrage and liquidity for their ETFs, as proposed under subsection III.B.2, to enable them to take action if their expected parameters are not met.

Depending on the investment strategies offered and the perceived risks of reverse-engineering and free-riding, ETF managers may, in the future, decide to provide other information for

<sup>&</sup>lt;sup>49</sup> Active ETFs do not seek to replicate the performance of an index, and do not seek to construct their portfolio in accordance with disclosed rules (e.g., holding an equally weighted portfolio selected in accordance with specified rules).

<sup>&</sup>lt;sup>50</sup> As this type of trading ahead of anticipated trades is similar to front-running, we use this term in our discussion.

<sup>&</sup>lt;sup>51</sup> We consider creation and redemption baskets to be portfolio information because the components in the baskets are either included in the ETF's portfolio or will be accepted by the ETF.

valuation (for example, providing varying levels of transparency of the ETF's portfolio).<sup>53</sup> Regardless of the type of valuation information provided for arbitrage, we believe that ETF managers have a strong market incentive to provide sufficient information to promote active AP participation and support effective arbitrage. In addition, our proposal for the disclosure of specific metrics to help investors evaluate the effectiveness of arbitrage will further encourage ETF managers to establish robust arrangements to facilitate efficient arbitrage, including providing information that allows for the accurate valuation of their ETFs.

#### 2. Disclosure of Valuation Information

The CSA also considered whether ETFs should publicly disclose valuation information on their websites, or if ETFs could choose to share it only with APs for arbitrage purposes.<sup>54</sup> Our view is that:

- requiring public disclosure of valuation information does not appear to be necessary. An ETF can decide whether to share valuation information solely to facilitate arbitrage, or make the information available to the public on its website; and
- an ETF should adopt policies and procedures governing the disclosure of portfolio information. The ETF should also disclose what information it shares about its portfolio for the purpose of arbitrage and for informing the public, and specifically, whether it discloses full daily portfolio holdings on its website.

The ETF industry began with the offering of passive, index-based ETFs. These early ETFs sought to replicate the performance of widely-recognized, broad market indices with publicly available compositions. Without proprietary strategies and with lower portfolio turnover, providing full portfolio holdings transparency daily to the public was common practice. This transparency allowed APs and other liquidity providers to use the holdings information for valuing the ETFs for arbitrage purposes, while also enabling investors to see the daily investment exposure. The popularity of passive ETFs may be attributed in part to this daily portfolio transparency that distinguished them from traditional mutual funds.

As discussed in section I, the Canadian ETF market has evolved significantly, introducing a variety of newer products that track fundamental indexes and bespoke indexes and offer exposure to different asset classes. Increasingly, investment fund managers are using the ETF structure to offer active strategies, seeking to use their investment research and analysis in products that have an investment objective of outperforming a benchmark index or providing absolute returns. These ETFs offer active portfolio management services with the benefits of the ETF structure, such as intraday trading, cost efficiency, and the ability to pass transaction costs relating to buying and selling (fund entry and exit) to the investors who engage in these transactions (rather than having the fund bear these costs). The industry continues to innovate, offering active ETFs that provide investors with a broader range of strategies and opportunities beyond index-based ETFs.

ETF managers mitigate the risks of free-riding and front-running in different ways, balancing perceived risks to themselves and their funds with market-driven factors, including investor

<sup>&</sup>lt;sup>53</sup> For example, adopting the "semi-transparent" disclosure models introduced in the U.S. after receiving exemptive relief from the U.S. regulator in 2019.

<sup>&</sup>lt;sup>54</sup> See consultation question 17 seeking feedback on other arrangements with entities that are not APs to conduct arbitrage and provide liquidity.

needs and preferences for portfolio information. Most index-based ETFs, having fewer concerns about free-riding, disclose their portfolio daily by posting all their current holdings daily on their website.<sup>55</sup>

In contrast, managers of active ETFs who are highly concerned about free-riding and frontrunning do not disclose their current portfolio holdings daily to the public. They typically provide full daily holdings to APs under confidentiality provisions and restrict the use of the information to market making. Some active ETF managers are of the view that investors have different information needs and abilities compared to APs. These managers believe that their investors are more concerned with the identity of the portfolio manager and the investment objectives, strategies and performance of the ETF, rather than daily holdings.<sup>56</sup>

Other ETF managers, including those managing index-based and active ETFs, disclose valuation information other than full daily portfolio holdings to their APs (such as creation and redemption baskets), and also do not make such valuation information available to the public for the same trading day. They are concerned that disclosing full daily holdings could allow free-riding or expose their ETFs to front-running risks. As well, they believe that valuation information is needed for arbitrage and is not used by their target investors.<sup>57</sup>

Based on our review of a sample of ETF websites, ETFs that do not publicly disclose full daily holdings typically provide other information on their website regarding their portfolio, such as:

- full portfolio holdings or partial holdings (e.g., top 10 holdings) as of the last day of each month with a 30 or 60 day delay, and/or
- summary characteristics of the portfolio that provide a snapshot of the market exposure provided by the ETF, similar to the portfolio information provided on an aggregate basis in the summary of investment portfolio in the management report of fund performance (e.g., industry sector or geographic allocation, aggregate price/earnings ratio of the portfolio holdings, or in the case of fixed income ETFs, duration and credit quality, etc.). This information is typically updated periodically (e.g., monthly).

Information sharing practices that do not make the same information equally available to all market participants can lead to concerns about information asymmetry, as there is a potential for APs that receive valuation information from an ETF to have an unfair information advantage. The CSA considered whether ETFs should publicly disclose their portfolio holdings or other valuation information to address this asymmetry. After weighing the factors below, our view is that public disclosure should not be required:

• *investor use of valuation information* – while ETFs have provided daily portfolio holdings information and other valuation information to the public, enabling investors to assess the ETF's investment exposure, most investors do not use the information daily and do not have the capability to use valuation information in the same way as dealers that are conducting arbitrage and providing liquidity. Therefore, making valuation information available to the public for the trading day may not effectively address information asymmetry concerns

<sup>&</sup>lt;sup>55</sup> See OSC ETF Study (pp.9-10).

<sup>&</sup>lt;sup>56</sup> See OSC IF Practitioner at footnote 46.

<sup>&</sup>lt;sup>57</sup> See OSC IF Practitioner at footnote 46.

- arbitrage efficiency a key risk of information asymmetry in this context is that APs may
  not make markets for the ETF as efficiently, in the same way that they would if the
  information were publicly disclosed. For example, they may have opportunities to widen
  the gap between quoted prices and the ETF's underlying value and quote wider spreads.
  This risk may be elevated if the ETF has only one AP, potentially distorting ETF pricing
  and allowing the AP to set intraday prices that are not closely linked to the ETF's
  underlying value. However, most ETFs have multiple APs,<sup>58</sup> and the OSC ETF Study
  found that public disclosure of full daily portfolio holdings was not associated with quoted
  spreads or deviations from NAV,<sup>59</sup> suggesting that market making is not different
  whether an ETF publicly discloses daily portfolio holdings or not
- attracting liquidity provision ETFs that do not make valuation information public, and particularly ETFs that do not seek to replicate the performance of a widely-recognized index, may be less likely to attract other dealers (who do not have the same information as APs) to compete in arbitrage and liquidity provision. However, most ETFs appear to have made appropriate arrangements for dealers to support arbitrage, as indicated by the small average deviations to NAV and narrow average spreads in the market, even for ETFs that do not publicly disclose valuation information<sup>60</sup>
- supporting availability of diverse ETFs allowing ETF managers to provide valuation information to APs without publicly disclosing this information helps ETF managers manage the risks of front-running and free-riding, which are of particular concern for active ETFs. Requiring public disclosure so that all market participants receive the same information (including investors that do not conduct arbitrage and do not use the information for valuation) may discourage the offering of active ETFs, reducing product choices for investors
- risks of asymmetry can be addressed we are also of the view that, collectively, the proposals discussed in the Consultation Paper address the risks of information asymmetry, as outlined in subsection III.D.5 below.

As long as the risks of information asymmetry can be addressed and provided that arbitrage can be maintained effectively to align market prices closely with the ETF's underlying value and narrow spreads, we believe that ETF managers should be permitted to continue their current disclosure practices and choose whether to disclose valuation information publicly. This approach supports the availability of active strategies in the ETF market, increasing investment choices and benefitting investors.

#### 3. Policies and Procedures for Disclosure of Portfolio Information

Given the history and development of the ETF market, we think investors consider the availability of information about an ETF's portfolio holdings to be an important feature of an ETF. As well, the valuation information that is provided for arbitrage purposes is critical for an ETF's operations. The CSA propose that an ETF be required to:

<sup>&</sup>lt;sup>58</sup> We also seek feedback on a requirement to have a minimum of 2 APs in subsection III.C.3.

<sup>&</sup>lt;sup>59</sup> See OSC ETF Study (pp.23, 29-30).

<sup>&</sup>lt;sup>60</sup> See OSC ETF Study (pp.32-33).

(a) establish, maintain and follow written policies and procedures governing the disclosure of portfolio information to:

- facilitate arbitrage
- inform the public; and

(b) disclose key elements of these policies and procedures in its prospectus and on its website (as discussed further below under "4. Disclosure of Policies and Procedures").

We propose that the policies and procedures specify the following:

- *portfolio information for arbitrage* the portfolio information the ETF provides to APs (and other liquidity providers, if applicable) for valuation to facilitate arbitrage, including how frequently this information is provided and the recipients of the information
- conditions and restrictions any conditions or restrictions that apply to the use of the valuation information, including any requirement that the information be kept confidential or any restrictions on trading based on the information
- *portfolio information for the public* the portfolio information the ETF provides to the public on its website, including how frequently this information is provided and any delay between the date of the information and the date it is provided
- process for providing information the process for providing information to APs and on the ETF's website
- equal access for APs the procedures for ensuring that the same information is provided to all APs at the same time and under the same conditions (as proposed in subsection III.C.2).

As we propose giving ETFs flexibility in sharing portfolio information, implementing procedures and controls is intended to help ensure that the information is shared consistently in accordance with the ETF's policies. ETF managers may face conflicts of interest in the sharing of portfolio information. Robust policies and procedures to ensure that portfolio information disclosures are transparent and in the best interests of investors will help manage these conflicts. In addition to providing transparency about its policies (as proposed below), the ETF manager should consider whether its policies for sharing portfolio information may be a "conflict of interest matter" (as defined in National Instrument 81-107 *Independent Review Committee for Investment Funds*) that requires review by the ETF's independent review committee.

Establishing these policies and procedures will also strengthen compliance with the proposed disclosure requirements in the ETF's prospectus and website outlined below regarding the sharing of portfolio information. We believe that providing this disclosure would help to address asymmetry risks where portfolio information shared with APs is not provided to investors concurrently.

#### 4. Disclosure of Policies and Procedures

Due to the range of practices on portfolio information disclosure, the CSA believe there is a gap in investor understanding of: (a) whether current daily portfolio holdings information is available to the public, and if not, what information about the ETF's portfolio is available, and (b) the type of valuation information provided to facilitate arbitrage, which may not be publicly disclosed.

To address this gap, the CSA propose that the ETF's prospectus and website: (a) clarify whether the ETF provides current daily portfolio holdings to the public, and (b) disclose key elements of the ETF's policies for disclosing portfolio information for arbitrage and to the public (the **Portfolio Information Disclosure Policy**).

First, we propose that an ETF disclose any portfolio information to the public by posting the information on its website, rather than disclosing it through other means or ahead to certain investors (such as making the information available upon request). Additionally, we propose that the following information be provided under the heading "Portfolio Information Disclosure Policy" on the ETF's website and in the prospectus:

- a. Under the sub-heading "Portfolio Holdings Information Available on our Website":
  - i. state whether the ETF is a "daily transparent ETF" that provides all of its current portfolio holdings daily on its designated website. We propose to define "daily transparent ETF" as an ETF that: (a) makes available to the public, before the opening of regular trading on the listing exchange for the ETF's securities on a given day, all of the portfolio holdings that will be used to calculate NAV on that day, by posting such information on a "designated website";<sup>61</sup> and (b) does not make available the information referred to in (a) to any market participant before posting the information on the designated website.
  - ii. If the ETF is not a "daily transparent ETF", disclose:
    - the portfolio information that the ETF provides to the public on its designated website, including how frequently this information is provided and any delay between the date of the information and the date it is provided;<sup>62</sup> and
    - 2) whether the ETF provides portfolio information other than the information disclosed on its designated website daily to facilitate arbitrage, as described under the sub-heading "Information Provided for Valuing the ETF".
- b. Under the sub-heading "Information Provided for Valuing the ETF":
  - i. If the ETF is a "daily transparent ETF", state that the full portfolio holdings information available on the ETF's designated website can be used for valuing the ETF to facilitate arbitrage and liquidity provision.<sup>63</sup>

<sup>&</sup>lt;sup>61</sup> See NI 81-106 for the definition of "designated website".

<sup>&</sup>lt;sup>62</sup> For example, information provided on the ETF's website may consist of a summary of the full portfolio based on different characteristics, similar to the summary provided in the ETF's management report of fund performance (such as a geographic or industry exposure, market capitalizations, etc.) as of the last day of each month that is updated 10 days after the last day of the month, full portfolio holdings as of the end of each month that are updated 15 days after the last day of the month, top 10 current portfolio holdings that are disclosed daily, etc.

<sup>&</sup>lt;sup>63</sup> The definition of "daily transparent ETF" is intended to describe ETFs that provide full daily portfolio holdings to the public on the ETF's website before the opening of each trading day, without disclosing such information ahead to any

- ii. If the ETF is not a "daily transparent ETF":
  - state whether full daily portfolio holdings are provided to other entities. If other portfolio information is provided for valuing the ETF to facilitate arbitrage and liquidity provision, describe the information that the ETF provides, including how frequently the information is provided;
  - 2) describe the ETF's process for providing the valuation information;
  - state whether any conditions or restrictions apply to the use of the valuation information, including any requirement that the information be kept confidential or any restrictions on trading based on the information;
  - 4) disclose the recipients of the valuation information<sup>64</sup>; and
  - 5) disclose the rationale for not making the information in subsection 1) available on the ETF's website.

We proposed that the above information regarding an ETF's Portfolio Holdings Disclosure Policy be provided in the ETF's prospectus and on its website, as we believe that investors access ETF websites to obtain information regarding ETFs.

#### 5. Addressing Information Asymmetry Concerns

The CSA believe that our proposals to enhance the ETF framework, collectively, also mitigate concerns regarding ETF managers disclosing portfolio information only to APs for arbitrage:

- disclosing trading metrics on ETF website (see subsection III.B.1) by disclosing historical spreads and deviations from NAV on the ETF's website, investors will be able to assess how well the ETF manager's arrangements facilitate arbitrage and maintain narrow spreads. We believe this disclosure is critical because ETF managers have flexibility to implement various arrangements to facilitate arbitrage, including providing different levels of valuation information and disclosing the information only to APs, and contracting with a diverse group of APs
- *ETF manager monitoring of arbitrage (see subsection III.B.2)* monitoring whether the arbitrage mechanism is functioning as expected by the ETF manager will increase oversight of the arrangements for arbitrage implemented and enable the ETF manager to (i) assess the reasons for significant deviations from expected

market participants (including APs). We understand that ETF managers may provide portfolio holdings information directly to APs through other arrangements before the opening of each trading day (such as through file transfers), but do not believe the different ways of providing daily portfolio holdings information for each trading day pose concerns and therefore, we do not propose that the different information provision arrangements be required to be disclosed in the prospectus or on the ETF's website for a "daily transparent ETF".

<sup>&</sup>lt;sup>64</sup> For example, the valuation information is provided to APs only.

parameters (which may result in adjustments to reduce the deviations), and (ii) address the deviations with APs

- fostering competition in arbitrage and liquidity provision (see subsections III.A and III.C) – competition among APs (and other liquidity providers) contributes to efficient arbitrage. We proposed ways to level the playing field for APs in their interactions with the ETF (including adopting policies and procedures to promote consistency in primary market processes and providing valuation information to APs on an equal basis) and seek feedback on a requirement for ETFs to have at least 2 APs to avoid a single AP having exclusive access to valuation information. Further, we proposed that AP arrangements be disclosed to enhance transparency, allowing investors to see if the ETF manager has established arrangements that promote competition
- providing transparency regarding the ETF's Portfolio Information Disclosure Policy (see subsection III.D.4) – providing transparency regarding the portfolio information shared by an ETF will help investors determine if the ETF is suitable for their needs. In particular, the disclosure proposed in subsection III.D.4 will clarify whether the full daily portfolio holdings of the ETF are made available to the public. Investors who require daily portfolio holdings transparency for their investment decisions will be able to select ETFs that provide this level of information. Investors concerned about an ETF's lack of daily public disclosure of current portfolio holdings or about additional portfolio information being disclosed to specific recipients for market making may decide not to invest in such ETFs.

#### i) Other Measures Considered

The CSA also considered whether there may be other measures that could address asymmetry concerns.

#### a) Publication of an Indicative Net Asset Value (iNAV)

Some jurisdictions require the publication of an iNAV. As discussed in the IOSCO ETF Good Practices, an iNAV is a real-time estimate of the intraday NAV of an ETF based on real-time market values of its underlying assets, and is often calculated by a third-party service provider. Jurisdictions that require an iNAV generally require that it be disseminated regularly (e.g., 15 or 60 second intervals) throughout the trading day and made available to all market participants.<sup>65</sup> iNAV is believed to serve as alternative information about an ETF's portfolio that could (a) facilitate secondary market trading for retail investors by providing a benchmark for the current portfolio value, and (b) potentially facilitate effective arbitrage.

However, the IOSCO ETF Good Practices also noted the potential shortcomings of an iNAV, including questions about the accuracy and reliability of iNAVs resulting from stale pricing (particularly with less liquid holdings and differences in time zones of the markets in which ETF holdings trade). We are concerned that an iNAV could be considered to represent the current value of an ETF even though underlying markets have moved, creating confusion for investors. We further understand that APs have historically not relied on an iNAV for valuing an ETF; therefore, it is not clear that this information would be useful to address asymmetry concerns.

<sup>&</sup>lt;sup>65</sup> IOSCO ETF Good Practices (p.65).

While, in some circumstances, an iNAV could provide information about the recent value of an ETF's portfolio, the CSA does not believe a requirement for all ETFs to publish an iNAV would uniformly help to reduce asymmetry risks.

#### b) Disclosure of Full Portfolio Holdings on a Less Frequent and/or Delayed Basis

As discussed in the IOSCO ETF Good Practices, some jurisdictions allow ETFs to share portfolio information to APs without sharing it with the public concurrently. These jurisdictions often require ETFs to disclose their full portfolio holdings to the public on a less frequent, delayed basis.<sup>66</sup> For example, ETFs may be required to disclose their full portfolio holdings as of the end of each month, with a delay of up to 30 days. The CSA did not propose this disclosure approach because it is not clear that this approach effectively addresses information asymmetry.

While many Canadian ETFs provide daily portfolio holdings to the public, some do not have this disclosure policy. ETFs have balanced the need to provide sufficient information for valuation and arbitrage with the risks of front-running and free-riding, while also meeting investor expectations for up-to-date information regarding the ETF's portfolio. Considering the different factors that contribute to effective arbitrage, and that the industry has evolved to offer a range of ETFs that are supported by effective arbitrage, it appears that full daily portfolio holdings transparency may not be a fundamental, essential feature of an ETF. Instead, it may be a factor that investors consider when choosing ETFs, leading some ETFs to disclose their daily full holdings to the public for competitive reasons, despite the associated risks.

Therefore, we did not propose that ETFs be required to disclose specific portfolio information to the public, such as disclosing portfolio holdings on a less frequent or delayed basis. Instead, we propose that ETF managers be allowed to continue their current approach of considering the information needs and expectations of their target investors, and providing information accordingly. Under our proposal in subsection III.D.4, an ETF's Portfolio Information Disclosure Policy would be disclosed on its website and prospectus. An ETF may adopt policies that include providing delayed disclosure of full portfolio holdings on the ETF's website to help investors understand the ETF's investment exposure as of a previous date or identify the holdings that contributed to its performance.

#### **Consultation Questions:**

- 22. Should ETFs continue to be allowed to determine the type of valuation information they provide to facilitate the arbitrage mechanism? If not, what parameters for portfolio information would ensure that the valuation information provided can facilitate effective arbitrage that will promote close tracking of the market price of the ETF to the underlying value? For example, should there be a requirement to provide the portfolio holdings that make up a minimum percentage of the portfolio's value?
- 23. Do our proposals, as outlined in subsection III.D.5, sufficiently address the risks of information asymmetry? Are there additional measures that could further reduce these risks?
- 24. Do you agree that permitting ETFs to provide full portfolio holdings (or other valuation information) daily only to APs for market making purposes strikes an appropriate balance

<sup>&</sup>lt;sup>66</sup> IOSCO ETF Good Practices (p.24).

between offering investors more product choice and the potential risks of information asymmetry?

- 25. Do the proposed policies and procedures regarding an ETF's disclosure of portfolio information for valuation and its disclosure of portfolio information to the public outlined in subsection III.D.3 cover the key elements for portfolio information disclosure?
- 26. Would the proposed disclosure requirements regarding an ETF's Portfolio Holdings Disclosure Policy in the ETF's prospectus and website provide sufficient information about the public availability of information regarding the ETF's portfolio holdings and the portfolio information that it provides to facilitate arbitrage? Is there other information that would be helpful for an ETF to disclose about its Portfolio Information Disclosure Policy? Should the proposed disclosure be included in both the prospectus and the ETF's website?
- 27. Does the proposed defined term "daily transparent ETF" effectively convey to investors that such an ETF discloses its full portfolio holdings to the public daily?
- 28. Should ETFs be required to publish an iNAV and why? If yes, please provide estimates of costs for publishing an iNAV for a specified frequency (e.g., every 15 seconds).
- 29. Should ETFs be required to provide public disclosure of full portfolio holdings on a less frequent and/or delayed basis, such as at the end of each month, with a delay of no more than 30 days? Please specify the benefits and costs of any proposal for less frequent (e.g., weekly, monthly, etc.) and/or delayed public disclosure of full holdings, including details on the proposed frequency and delay.

#### E. Offering an Exchange-Traded Series Together with Unlisted Series

The CSA has observed an increase in funds that offer both exchange-traded series and unlisted series. The exchange-traded series, often referred to as "ETF series" or "Series ETF", are referable to the same pool of assets as conventional mutual fund units that are not listed on an exchange, appealing to a broader range of investors. The CSA has provided exemptive relief to facilitate the offering of exchange-traded series, allowing an exchange-traded series to be treated as if it were a fund that is separate from the assets attributable to the unlisted series.

An exchange-traded series may benefit from being part of a mutual fund that offers unlisted series. An existing mutual fund with substantial assets could reduce fixed costs for the exchange-traded series (e.g., marketing costs, audit costs, costs related to the independent review committee, etc.) and provide investment fund managers with an efficient way to launch an "ETF". The track record of the unlisted series may also help attract assets to the new exchange-traded series. The offering of both series could broaden distribution opportunities and attract a larger amount of assets, providing economies of scale for the fund.

The CSA considered the differences between investing in an exchange-traded series and an ETF that does not offer unlisted units (a **standalone ETF**) and whether conflicts of interests may arise between the two series. Potential differences associated with offering unlisted series together with exchange-traded series include:

 portfolio transaction costs from investor entry and exit – Unlisted series use cash for transacting with investors, and investors' purchases and redemptions of unlisted series may generate portfolio transaction costs. In contrast, exchange-traded series that transact with APs on an in-kind basis would be expected to have lower portfolio transaction costs, as such costs are borne by APs and passed on to transacting investors.<sup>67</sup> We observed that generally, the trading expense ratio of the exchangetraded series and of the unlisted series of existing funds presented in disclosure documents are the same, indicating that the same level of costs is allocated proportionately to both the exchange-traded series and unlisted series even if portfolio transaction costs may be lower for exchange-traded series. Investors in a standalone ETF would have the benefit of not being impacted by portfolio transaction costs arising from investor entry and exit

- *cash drag* A fund offering both series may need to hold more cash to satisfy redemptions from unlisted series holders, as compared to a standalone ETF that transacts using in-kind securities
- *portfolio rebalancing costs* A fund offering both series may not be able to use in-kind transactions to the same extent as a standalone ETF to rebalance its portfolios, resulting in higher portfolio transaction costs that are allocated to both series.

We seek feedback on the differences between investing in an exchange-traded series and a standalone ETF, and whether additional disclosure is needed to clarify the differences, including potential costs, risks (including conflicts of interests) and benefits. We also seek feedback on whether portfolio transaction costs related to unlisted series inflows and redemptions discussed above could be allocated solely to the unlisted series, as if the unlisted series were a separate fund.<sup>68</sup> A fund-on-fund structure where a mutual fund invests all of its assets in units of an underlying ETF and that buys and sells units of the underlying ETF in response to investor entry and exit would achieve a similar outcome, but may involve higher costs for operating two separate funds.

We observed that there are varying practices among investment fund managers regarding the switching of exchange-traded series units to unlisted series units. Most managers prohibit switches to or from the exchange-traded series to unlisted series, while others allow them. We believe that restricting switches to or from exchange-traded series units is consistent with the liquidity preferences of each group of investors. Additionally, during volatile market conditions, if exchange-traded series units were to trade at a significant discount to NAV, market participants would not have the opportunity to purchase these units, switch to unlisted series units, and redeem at NAV. We seek feedback on whether funds that offer both exchange-traded and unlisted series should be required to prohibit switches between the two series of units.

<sup>&</sup>lt;sup>67</sup> See footnote 15.

<sup>&</sup>lt;sup>68</sup> For example, where hedged and unhedged series units are offered by one fund, investment fund managers typically track the hedging instruments used in the currency hedged series and allocate currency hedging costs to the hedged series units only.

#### **Consultation Questions:**

- 30. Are there differences between investing in an exchange-traded series and a standalone ETF in addition to those discussed above? Please specify any additional benefits, costs or risks of investing in an exchange-traded series compared to a standalone ETF. Is there a potential for conflict of interest matters to arise in the management of an exchange-traded series and unlisted series within one fund, where the fund manager's actions could prioritize the interests of one series over the other?
- 31. Are there costs attributable only to unlisted series (such as costs attributable to purchases or redemptions of unlisted series, as discussed above) that are shared with the exchange-traded series? Could such costs be allocated only to the unlisted series to avoid impacting the exchange-traded series, such that the exchange-traded series would operate more similarly to a standalone ETF?
- 32. Is additional disclosure necessary to inform investors of the differences between investing in an exchange-traded series and a standalone ETF? Should this disclosure be included in the ETF facts document or only in the prospectus?
- 33. Should there be a restriction on switches to and from exchange-traded series? Should the restriction only apply to switches from exchange-traded series to unlisted series?

#### F. Availability of Foreign ETFs

As noted in subsection II.A.2, investors can access U.S.-listed ETFs through brokerage accounts with Canadian investment dealers, including full-service brokerages and discount brokers, even though U.S.-listed ETFs do not market directly in Canada. This access makes available a wide array of products, including U.S.-listed ETFs that may engage in strategies not permitted under NI 81-102. Investors can also purchase U.S.-listed ETFs that offer the same investment exposures as competing Canadian ETFs, such as passive exposure to U.S. and international market indexes. A significant portion of ETF assets held by Canadian investors are in U.S.-listed ETFs.<sup>69</sup>

Additionally, investors may have exposure to foreign ETFs through investment fund holdings. NI 81-102 prohibits publicly offered investment funds from investing in underlying funds that are not compliant with CSA fund regulations, preventing the indirect offering of non-compliant foreign investment funds in Canada.<sup>70</sup> However, NI 81-102 allows exemptions for "index participation units" (**IPUs**).<sup>71</sup> As defined in NI 81-102, an IPU is an index-based ETF that tracks the performance of a specified widely quoted market index and that is listed in Canada or the United

<sup>&</sup>lt;sup>69</sup> As of December 2024, U.S.-listed ETFs represented approximately \$108 billion or 25% of total ETF assets (Canadian and US-listed) held by Canadian retail investors. Data provided by ISS Market Intelligence, Investor Economics ETF and Index Funds Report 2024.

All rights in the information provided by Institutional Shareholder Services Canada Inc. and its affiliates (ISS) reside with ISSCI and/or its licensors. ISSCI makes no express or implied warranties of any kind and shall have no liability for any errors, omissions or interruptions in or in connection with any data provided by ISSCI.

<sup>&</sup>lt;sup>70</sup> See subsections 2.5(2)(a) and (c) of NI 81-102.

<sup>&</sup>lt;sup>71</sup> See subsection 2.5(3) of NI 81-102.

States. When NI 81-102 was implemented, ETFs were relatively new investment vehicles and were mainly listed on Canadian and U.S. exchanges.

The exemption for IPUs, along with the exemption from the concentration restriction in subsection 2.1(2)(d) of NI 81-102, allows ETFs to invest 100% of their assets in U.S.-listed index-based ETFs, often managed by an affiliated manager. This structure allows Canadian ETFs to feed assets into larger U.S.-listed ETFs, providing operational efficiencies. As assets grow, ETF managers may collapse the "feeder" structure and invest in the underlying securities in the reference index directly, balancing factors such as applicable tax considerations and operational and trading costs.

As ETFs represent an efficient and cost-effective way of achieving exposure to a wide range of markets and asset classes, investment fund managers have sought exemptive relief to invest in foreign ETFs beyond U.S.-listed IPUs, including those managed by unaffiliated fund managers. Initially, relief allowed investment funds to invest up to 100% of net assets in foreign indexbased ETFs listed outside the U.S., such as in Hong Kong and the UK.<sup>72</sup> The rationale was that these ETFs would qualify as IPUs if listed in Canada or the U.S. and are subject to a regulatory regime comparable to that in Canada.

Over time, relief has been extended to allow investments in U.S. ETFs that: (a) are not IPUs, as the reference index tracked by the U.S. ETFs may not be considered to be a widely recognized market index, or (b) are actively managed.<sup>73</sup> Initially, this relief was limited to 10% of net assets, but recently, ETFs have been granted relief to invest 100% of their net assets in related underlying active U.S. ETFs.<sup>74</sup>

Generally, relief has not been granted to allow investment funds to obtain exposure to foreign ETFs that engage in strategies not permitted under NI 81-102. However, investors can directly buy U.S.-listed ETFs that may engage in non-81-102 compliant strategies through their brokerage accounts.

The CSA seeks stakeholder views on the availability of foreign ETFs to the public, both directly through brokerage accounts and indirectly through publicly offered investment funds.

#### **Consultation Questions:**

34. Please provide your views on the availability of foreign ETFs for investors through brokerage accounts and through holdings by investment funds subject to NI 81-102.

<sup>&</sup>lt;sup>72</sup> See, for example, *In the Matter of Horizons ETFs Management (Canada) Inc.* dated July 24, 2015, *available at* <u>https://www.osc.ca/en/securities-law/orders-rulings-decisions/horizons-etfs-management-canada-inc-2</u>, *In the Matter of BMO Investments Inc.* dated September 18, 2015, *available at* <u>https://www.osc.ca/en/securities-law/orders-rulings-decisions/bmo-investments-inc-8</u> and *In the Matter of CI Investments Inc.* dated February 28, 2020, *available at* <u>https://www.osc.ca/en/securities-law/orders-rulings-decisions/ci-investments-inc-8</u> and *In the Matter of CI Investments Inc.* dated February 28, 2020, *available at* <u>https://www.osc.ca/en/securities-law/orders-rulings-decisions/ci-investments-inc-4</u>.

<sup>&</sup>lt;sup>73</sup>See, for example, *In the Matter of AGF Investments Inc.* dated November 2, 2016, *available at* <u>https://www.osc.ca/en/securities-law/orders-rulings-decisions/agf-investments-inc-4</u> and *In the Matter of TD Asset Management Inc.* dated May 27, 2016, *available at* <u>https://www.osc.ca/en/securities-law/orders-rulings-decisions/td-asset-management-inc-5</u>.

<sup>&</sup>lt;sup>74</sup> See In the Matter of FT Portfolios Canada Co. dated September 11, 2024, available at <u>https://www.osc.ca/en/securities-law/orders-rulings-decisions/ft-portfolios-canada-co-4</u> and In the Matter of JP Morgan Asset Management (Canada) Inc. dated September 11, 2024, available at <u>https://www.osc.ca/en/securities-law/orders-rulings-decisions/jp-morgan-asset-management-canada-inc</u>.

35. Are there any additional measures that would be beneficial for investors in their consideration of investments in foreign ETFs in comparison to investments in Canadian ETFs?

#### G. Rule Amendments to Implement Proposals

After receiving feedback on our proposals, in the areas where we conclude rules are necessary, the CSA will publish proposed rules or rule amendments for comment following the CSA's usual public comment process. We anticipate that any new requirements would be added by amending existing investment fund rules such as NI 81-102 and NI 81-106. For example, if implemented, the requirement for policies and procedures for creations and redemptions would be added to NI 81-102 and the website disclosure of key metrics would be added to NI 81-106.

#### **Comments and Submissions**

We invite participants to provide input on the issues outlined in this public consultation paper. You may provide written comments in hard copy or electronic form. The consultation period expires **October 17, 2025**.

Certain CSA regulators require publication of the written comments received during the comment period. We will publish all responses received on the websites of the Autorité des marchés financiers (<u>www.lautorite.qc.ca</u>), the Ontario Securities Commission (<u>www.osc.ca</u>), and the Alberta Securities Commission (<u>www.albertasecurities.com</u>). Therefore, you should not include personal information directly in comments to be published. It is important that you state on whose behalf you are making the submission.

Please submit your comments in writing on or before October 17, 2025.

Address your submission to all of the CSA as follows:

British Columbia Securities Commission Alberta Securities Commission Financial and Consumer Affairs Authority of Saskatchewan Manitoba Securities Commission Ontario Securities Commission Autorité des marchés financiers Financial and Consumer Services Commission, New Brunswick Superintendent of Securities, Department of Justice and Public Safety, Prince Edward Island Nova Scotia Securities Commission Office of the Superintendent of Securities, Service NL Northwest Territories Office of the Superintendent of Securities Office of the Yukon Superintendent of Securities Nunavut Securities Office

Deliver your comments **only** to the addresses below. Your comments will be distributed to the other participating CSA regulators.

The Secretary Ontario Securities Commission 20 Queen Street West 19th Floor, Box 55 Toronto, Ontario M5H 3S8 Fax: 416-593-2318 comments@osc.gov.on.ca

Me Philippe Lebel Corporate Secretary and Executive Director, Legal Affairs Autorité des marchés financiers Place de la Cité, tour PwC 2640, boulevard Laurier, bureau 400 Québec (Québec) G1V 5C1 Fax: 514-864-8381 <u>consultation-en-cours@lautorite.qc.ca</u>

#### Questions

Please refer your questions to any of the following:

British Columbia Securities Commission

James Leong Senior Legal Counsel British Columbia Securities Commission Tel: 604- 899-6681 Email: jleong@bcsc.bc.ca

Alberta Securities Commission

Melissa Yeh Legal Counsel, Corporate Finance Alberta Securities Commission Tel: 403-355-4181 Email: <u>melissa.yeh@asc.ca</u> Michael Wong Senior Securities Analyst, Corporate Finance British Columbia Securities Commission Tel: 604-899-6852 Email: <u>mpwong@bcsc.bc.ca</u>

Chad Conrad Senior Legal Counsel, Investment Funds Alberta Securities Commission Tel: 403-297-4295 Email: <u>chad.conrad@asc.ca</u>

#### Financial and Consumer Affairs Authority of Saskatchewan

Heather Kuchuran Director, Corporate Finance Financial and Consumer Affairs Authority of Saskatchewan Tel: 306-787-1009 Email: <u>heather.kuchuran@gov.sk.ca</u>

Manitoba Securities Commission

Patrick Weeks Deputy Director, Corporate Finance Manitoba Financial Services Agency Manitoba Securities Commission Tel: 204-945-3326 Email: <u>patrick.weeks@gov.mb.ca</u> Ontario Securities Commission

Stephen Paglia Vice President, Investment Management Division Ontario Securities Commission Tel: 416-593-2393 Email: spaglia@osc.gov.on.ca

Autorité des marchés financiers

Philippe Lessard Analyst, Investment Products Oversight Autorité des marchés financiers Tel: 514-395-0337, ext. 4364 Email: <u>philippe.lessard@lautorite.qc.ca</u> Pei-Ching Huang Senior Legal Counsel, Investment Management Division Ontario Securities Commission Tel: 416-593-8264 Email: phuang@osc.gov.on.ca

Laurence Brien-Roch Senior Analyst, Investment Products Oversight Autorité des marchés financiers Tel: 514 395-0337, ext. 4483 Email: <u>Laurence.Brien-Roch@lautorite.gc.ca</u>

Financial and Consumer Services Commission (New Brunswick)

Ray Burke Manager, Corporate Finance Financial and Consumer Services Commission Tel: (506) 643-7435 Email: <u>ray.burke@fcnb.ca</u>

Nova Scotia Securities Commission

Jack Jiang Securities Analyst Nova Scotia Securities Commission Tel: 902-424-7059 Email: jack.jiang@novascotia.ca Peter Lamey Legal Analyst Nova Scotia Securities Commission Tel: 902-424-7630 Email: <u>peter.lamey@novascotia.ca</u>