



**AUTORITÉ
DES MARCHÉS
FINANCIERS**

Guideline on capital and liquidity treatment of cryptoasset exposures

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1. Introduction

1. The Trust Companies and Savings Companies Act¹ (“TCSCA”), the Deposit Institutions and Deposit protection Act² (“DIDPA”), the Act respecting financial services cooperatives³ (“AFSC”) and the Insurers Act (“IA”)⁴ empower the Autorité des marchés financiers (the “AMF”) to establish guidelines in order to inform its addressees of measures that, in the AMF’s opinion, may be established to satisfy certain obligations. These statutes impose financial management requirements pursuant to which trust companies, savings companies and other deposit institutions, as well as credit unions not members of a federation, financial services cooperatives and insurers (collectively “financial institutions”), must maintain adequate capital to ensure their sustainability and adequate assets (“liquidity”) to meet their liabilities, as and when they become due. More broadly, they are required to follow sound and prudent management practices.
2. The provisions of the *Guideline on capital and liquidity treatment of cryptoasset exposures* (the “Guideline” or the “CEGL”) are drawn primarily from the international supervisory standards proposed by the Basel Committee on Banking Supervision (“BCBS”).
3. The Guideline articulates the AMF’s expectations for financial institutions with respect to the capital and liquidity treatment of cryptoasset exposures.
4. The Guideline addresses cryptoassets as defined in the section Definitions below. It does not cover Central bank digital currencies (“CBDCs”).

2. Scope

5. The CEGL applies to financial institutions covered by the following guidelines and complements the requirements for the treatment of their cryptoasset exposures:
 - *Capital Adequacy Guideline - Financial services cooperatives belonging to a network, credit unions not members of a federation, trust companies, savings companies and other authorized deposit institutions (“Capital Adequacy Guideline”)*;
 - *Liquidity Adequacy Guideline*;
 - *Capital Adequacy Requirements Guideline - Life and health insurance (“CARLI”)*;
 - *Capital Adequacy Requirements Guideline - Property and casualty insurance*;
 - *Capital Adequacy Requirements Guideline - Self-regulatory organizations*;
 - *Capital Adequacy Requirements Guideline – Reciprocal Unions (“MCT”)*.

For the purposes of the CEGL, financial institutions must take into account the scope of the guideline(s) applicable to their activities, including in determining the basis on which these capital and liquidity requirements apply.

¹ CQLR, c. S-29.02.

² CQLR, c. I-13.2.2.

³ CQLR, c. C-67.3.

⁴ CQLR, c. A-32.1.

3. Definitions⁵

6. **Digital assets** are a digital representation in value which can be used for payment or investment purposes or to access a good or service. For the purposes of this Guideline, digital assets do not include CBDCs.
7. **Cryptoassets** are digital assets that depend primarily on cryptography, distributed ledger technology (“DLT”) or similar technology.⁶
8. Cryptoasset **exposures**⁷ include direct exposures to cryptoassets (direct issuances or holdings), as well as any indirect exposures whose value or risk is substantially determined by the value of one or more cryptoassets. These indirect exposures include (but are not limited to) securities of investment funds, trusts, partnerships or corporations.

The CEGL’s operational risk, risk management and supervisory review requirements are also applicable to financial institutions’ cryptoasset activities, such as custodial services involving the safekeeping or administration of client cryptoassets on a segregated basis, that do not generally give rise to credit, market or liquidity requirements.
9. A **tokenized traditional asset** is a cryptoasset where the reference asset is a **traditional asset or non-tokenized traditional asset** (e.g., share, bond, commodity, etc.).
10. A **stablecoin**⁸ is a cryptoasset designed to maintain a stable value relative to a reference asset (e.g., a currency or another value or right) or a reference pool or basket of assets.
11. **Nodes** are typically participants (entities including individuals) in distributed ledger networks that record and share data across multiple data stores (or ledgers).
12. **Operators** are typically a single administrative authority in charge of managing a cryptoasset arrangement, performing functions that may include issuing (putting into circulation) a centralized cryptoasset, establishing the rules for its use, maintaining a central payment ledger, and redeeming (withdraw from circulation) the cryptoasset.
13. **Redeemers** are the entities responsible for exchanging the cryptoasset for the traditional asset. A redeemer does not necessarily need to be the same as the entity responsible for organizing the issuance of the cryptoasset.

⁵ The definitions are taken from the document published by the BCBS on December 16, 2022 entitled “Prudential treatment of cryptoasset exposures”: [Prudential treatment of cryptoasset exposures \(bis.org\)](https://www.bis.org/prudential/treatment-of-cryptoasset-exposures).

⁶ With the exception of CBDCs, which are not covered by this Guideline.

⁷ Exposures include both on- or off-balance sheet amounts and non-fiduciary activities that give rise to credit, market, operational and/or liquidity risks.

⁸ In its 2022 report entitled [Review of the FSB High-Level Recommendations of the Regulation, Supervision and Oversight of “Global Stablecoin” Arrangements](#), the Financial Stability Board notes that there is still no universally agreed legal or regulatory definition of stablecoin. The AMF emphasizes that a stablecoin’s value may, in practice, deviate from the value of its reference asset or pool or basket of assets, despite the use of the term “stablecoin”. Although CSA Staff Notice 21-332 uses the term “value-referenced crypto asset,” the AMF has opted for the term “stablecoin” in this Guideline to ensure harmonization with SCO60 of the consolidated framework of the Basel Committee on Banking Supervision.

14. The **peg value** is the value of the reference asset(s) to which one unit of the cryptoasset is designed to be redeemable.
15. **Validators** are entities that commit transactions blocks to the distributed ledger network.

4. Classification of cryptoassets

16. For the purposes of this Guideline, cryptoassets are classified into two broad groups (Group 1 and Group 2). Each group is subdivided into two subgroups. The prudential treatment of cryptoasset exposures varies according to the classification of the cryptoassets.

4.1. Group 1 (G1)

17. G1 cryptoassets include cryptoassets of Group 1a (G1a) and Group 1b (G1b).
 - G1a consists of tokenized traditional assets that at all times meet conditions 1 to 3 and 5 to 7 below.
 - G1b consists of stablecoins with effective stabilization mechanisms that at all times meet conditions 1 and 4 to 7 below.

Condition 1. The cryptoasset is either (i) a tokenized traditional asset, or (ii) has a stabilization mechanism that is effective at all times in linking its value to a traditional asset or a pool of traditional assets (i.e., reference asset(s)).

Condition 2. Tokenized traditional assets will meet classification condition 1 only if they satisfy all of the following requirements:

- (i) They are digital representations of traditional assets using cryptography, DLT or similar technology to record ownership;
- (ii) They pose the same level of credit and market risk as the traditional (non-tokenized) form of the asset. In practice, this means:
 - a. for bonds, loans, claims on financial institutions (including in the form of deposits),⁹ equities and derivatives: The cryptoasset must confer the same level of legal rights as ownership of these traditional forms of financing (e.g., rights to cash flows, claims in insolvency, etc.). In addition, there must be no feature of the cryptoasset that could prevent obligations to the financial institution being paid in full when due as compared with a traditional (non-tokenized) version of the asset;

⁹ In certain jurisdictions, financial institution-issued or bank-issued tokenized payment assets that are backed by the general assets of the financial institution or bank and not by a pool of reserve assets may be referred to as “stablecoins.” Notwithstanding how they may generally be referred to within the jurisdiction, these assets may be included in Group 1a provided they meet all the requisite conditions and would not be placed in Group 1b based solely on their commonly used local name.

- b. for commodities: The cryptoasset must confer the same level of legal rights as traditional account-based records of ownership of a physical commodity;
- c. for cash held in custody: The cryptoassets must confer the same level of legal rights as cash held in custody.

Condition 3. Cryptoassets do not meet the conditions set out in condition 2 above if they:

- (i) first need to be redeemed or converted into traditional assets before they receive the same legal rights as direct ownership of traditional assets; or
- (ii) through their specific construction, involve additional counterparty credit risks relative to traditional assets.

Condition 4. Cryptoassets that have a stabilization mechanism will meet classification condition 1 above only if they satisfy all of the following requirements:

- (i) The cryptoasset is designed to be redeemable at all times for a predefined amount of a reference asset or assets (e.g., 1 USD, 1 Oz gold) or cash equal to the current market value of the reference asset(s) (e.g., USD value of 1 Oz gold).
- (ii) The stabilization mechanism is designed to minimize fluctuations in the market value of the cryptoassets relative to the peg value. To this end, the financial institution must have a monitoring framework in place verifying that the stabilization mechanism is functioning as intended. To this end, the financial institution must confirm and document that the cryptoasset meets the redemption risk test outlined in Annex 1. The documentation must be provided to the AMF when requesting its approval.
- (iii) The issuer of a cryptoasset that has a stabilization mechanism must be regulated by a supervisor that applies prudential capital and liquidity requirements.
- (iv) The stabilization mechanism enables risk management similar to the risk management of traditional assets, based on sufficient data or experience. For newly established cryptoassets, there may be insufficient data and/or practical experience to perform a detailed assessment of the stabilization mechanism. The financial institution will need to demonstrate the effectiveness of the stabilization mechanism to the AMF, including with respect to the composition, valuation and frequency of valuation of the reserve asset(s) and the quality of available data.
- (v) There exists sufficient, reliable information that the financial institution uses to verify the ownership rights of the reserve assets upon which the stable value of the cryptoasset is dependent. In the case of underlying physical assets, the financial institution must verify that these assets are stored and managed appropriately. This monitoring framework must function regardless of the cryptoasset issuer. The financial institution may use the assessments of independent third parties for the purposes of verification of ownership rights only if they are satisfied that the assessments are reliable. The financial institution must document its analysis of the reliability of the assessments of independent third parties and make it available to the AMF upon request.

Condition 5. All rights, obligations and interests arising from the cryptoasset arrangement are clearly defined and legally enforceable in all the jurisdictions where the asset is issued and redeemed. In addition, the applicable legal framework ensures settlement finality. The financial institution is therefore required to conduct a legal review of the cryptoasset arrangement to ensure this condition is met and make the review available to the AMF upon request.

To meet condition 5, the following requirements must be met:

- (i) At all times, the cryptoasset arrangements must ensure full transferability and settlement finality. In addition, cryptoassets with stabilization mechanisms must provide a robust legal claim against the issuer and/or underlying reserve assets and must ensure full redeemability (i.e., the ability to exchange cryptoassets for amounts of pre-defined assets such as cash, bonds, commodities, equities or other traditional assets) at all times and at their peg value. In order for a cryptoasset arrangement to be considered as having full redeemability, it must allow at all times for the redemption to be completed within a period not exceeding five calendar days after the redemption request.
- (ii) At all times, the cryptoasset arrangements must be properly documented, in particular in accordance with the following elements. For cryptoassets with stabilization mechanisms, cryptoasset arrangements must clearly define which parties have the right to redeem; the obligation of the redeemer to fulfil the arrangement; the timeframe for this redemption to take place; the traditional assets in the exchange; and how the redemption value is determined. These arrangements must also be enforceable in instances where parties involved in these arrangements may not be located in the same jurisdiction where the cryptoasset is issued and redeemed. At all times, settlement finality in cryptoasset arrangements must be documented such that it is clear when key financial risks are transferred from one party to another, including the point at which transactions are irrevocable. Financial institutions must ensure that the documentation described in this paragraph is publicly disclosed by the cryptoasset issuer. If the offering of the cryptoasset to the public has been approved by the relevant regulator on the basis of this public disclosure, condition (ii) will be considered fulfilled. Otherwise, an independent legal opinion would be needed to confirm condition (ii) has been met.

Condition 6. The functions of the cryptoasset and the network on which it operates, including the DLT or similar technology on which it is based, are designed and operated to effectively mitigate and manage any risks.¹⁰

¹⁰ To this end, entities performing activities associated with these functions must follow robust risk governance and risk control policies and practices to address risks including, but not limited to: credit, market and liquidity risks; operational risk (including outsourcing, fraud and cyber risk) and risk of loss of data; and various non-financial risks, such as data integrity; operational resilience (i.e., operational reliability and capacity); third party risk management; and Anti-Money Laundering/Countering the Financing of Terrorism (AML/CFT). Networks that fulfil this condition would be those where the key aspects are well-defined such that all transactions and participants are traceable. Key aspects include: (i) the operational structure (i.e., whether there is one or multiple entities that perform core function(s) of the network); (ii) degree of access (i.e., whether the network is restricted or un-restricted); (iii) technical roles of the nodes (including whether there is a differential role and responsibility among nodes); and (iv) the validation and consensus mechanism of the network.

Condition 7. Entities that execute redemptions, transfers, storage or settlement finality of the cryptoasset, or manage or invest reserve assets, must (i) be regulated and supervised and (ii) have implemented and disclose a comprehensive governance framework.¹¹

4.2. Group 2 (G2)

18. G2 consists of all cryptoassets that fail to meet the classification conditions required to qualify for G1a or G1b. G2 is divided into two subgroups, Group 2a (G2a) and Group 2b (G2b).

19. **G2a:** To be classified in this category, cryptoassets must meet hedging recognition conditions 8 to 10 set out below:

Condition 8. The financial institution's cryptoasset exposure is one of the following:

- (i) A direct holding of a spot Group 2 cryptoasset where there exists a derivative, exchange-traded fund (ETF) / exchange-traded note (ETN) or any other similar product that is traded on a regulated exchange that solely references the cryptoasset.
- (ii) A derivative or ETF/ETN that references a Group 2 cryptoasset, where the derivative or ETF/ETN has been explicitly approved by a jurisdiction's regulator¹² for trading or the derivative is cleared by a qualifying central counterparty.¹³
- (iii) A derivative or ETF/ETN that references a derivative or ETF/ETN that meets condition (ii) above.
- (iv) A derivative or ETF/ETN that references a cryptoasset-related reference rate published by a regulated exchange for such purposes as setting the interest or any other sum payable, setting the purchase or sale price or the value of the derivative or ETF/ETN, or measuring its performance, as applicable.

Condition 9. The financial institution's cryptoasset exposure, or the cryptoasset referenced by the derivative or ETF/ETN, is highly liquid. Specifically, both of the following must apply:

- (i) The average market capitalization is at least CAD15 billion over the previous year.¹⁴
- (ii) The 10% trimmed mean of daily trading volume with major fiat currencies is at least CAD75 million over the previous year.

¹¹ Entities regulated and supervised by a regulator are entities subject to standards comparable to those generally applied by the AMF. The AMF might not recognize the regulation and supervision of another regulator as comparable for the purposes of this requirement if it deems the regulator's standards or supervisory practices to be inadequate.

¹² The regulation and supervision of the jurisdiction's regulator must be comparable to that of the AMF. The AMF might not recognize the regulation and supervision of another regulator as comparable for the purposes of this requirement if it deems the regulator's standards or supervisory practices to be inadequate.

¹³ See Annex 3-II of the [Ligne directrice sur les normes relatives à la suffisance du capital de base \(l'authorite.qc.ca\) \(French version only\)](#).

¹⁴ For example, for calendar year 2022, the previous year's average market capitalization will be that computed considering the twelve months of the 2021 calendar year. The same principle is applied for the trimmed mean.

Condition 10. Sufficient data is available over the previous year. This implies that:

- (i) There are at least 100 price observations over the previous year. The prices must be “real” as defined in the four criteria of paragraph 300 of Chapter 9 of the Capital Adequacy Guideline; and
 - (ii) There is sufficient data on trading volumes and market capitalization.
20. Group G2b consists of all G2 cryptoassets that do not meet one or more hedging recognition conditions (conditions 8, 9 and 10 above).

5. General responsibilities applicable to financial institutions

21. The financial institution, on an ongoing basis, is responsible for assessing whether the cryptoassets to which it is exposed are compliant with the classification conditions set out in the Guideline. It must establish and notify the AMF in writing of the classification of the cryptoassets to which it is exposed. This assessment will determine whether the cryptoassets are classified as Group 1a, Group 1b, Group 2a or Group 2b. To this end, the financial institution must have in place the appropriate risk management policies, procedures, governance, human and IT capacities to evaluate the risks of engaging in cryptoassets on an ongoing basis. The financial institution must document the information used in determining compliance with the classification conditions and make this available to the AMF upon request.
22. The AMF will be responsible for: (i) reviewing and assessing the financial institution’s analysis and risk management and measurement approaches; and (ii) reviewing the financial institution’s classification decision. The AMF may override the financial institution’s classification decision if it does not agree with the financial institution’s assessments and/or classification. The cryptoasset to which the override applies must then be treated as a G2b cryptoasset.

6. Capital requirements for deposit institutions

6.1. Capital treatment of credit risk

23. G1a cryptoasset exposures are subject to the same rules to determine credit risk-weighted assets (“RWA”) as non-tokenized traditional assets as set out in Chapter 3 of the Capital Adequacy Guideline.¹⁵
24. Only Group 1a cryptoassets that are tokenized versions of the instruments included on the list of eligible financial collateral set out in Chapter 3 of the Capital Adequacy Guideline may qualify for recognition as eligible collateral for credit risk mitigation.¹⁶ However, the AMF may, at its sole discretion, not recognize a cryptoasset even if it is a tokenized version of an instrument included on the list of eligible financial collateral.

¹⁵ For example, a tokenized bond will be subject to the same risk weight as an equivalent non-tokenized corporate bond. Similarly, a tokenized deposit will be subject to the same treatment as an equivalent traditional deposit.

¹⁶ See Chapter 4 of the [Capital Adequacy Guideline \(lautorite.qc.ca\)](https://www.lautorite.qc.ca/en/capital-adequacy-guideline).

25. Group 1b, 2a and 2b cryptoassets receive no recognition as collateral. Such cryptoasset collateral must be subject to a 100% haircut.
26. All group 1b, 2a and 2b cryptoasset exposures held in the banking book must be deducted from Tier 1A capital.

6.2. Capital treatment of counterparty credit risk (CCR)

27. Counterparty risk exposures must be treated in accordance with Annex 3-II of the Capital Adequacy Guideline while taking into account the elements contained in paragraphs 28 to 30.
28. Derivatives referencing G1a cryptoassets must be subject to the same rules to determine CCR RWA as non-tokenized traditional assets. To use the internal models approach for a cryptoasset, deposit institutions must demonstrate that they have sufficient data (see condition 10) and must have the approval of the AMF.
29. For derivatives referencing group 1b, 2a and 2b cryptoassets, the standardized approach must be applied to determine CCR RWA.
30. Group 1b, 2a and 2b cryptoassets are subject to the following additional requirements:
 - (i) The replacement cost (“RC”) takes legally enforceable netting of all transaction types in the netting set¹⁷ into account.
 - (ii) In order to calculate the potential future exposure (“PFE”) add-on, a new asset class called “Crypto” must be created:
 - a. The mathematical structure for calculating the PFE add-on for the Cryptoasset class will be in line with the structure used in the foreign exchange asset class but with the parameters in points b to g below.
 - b. There are separate hedging sets for each cryptoasset priced in applicable fiat currencies (e.g., Bitcoin in USD, Bitcoin in CAD, Ethereum in USD, Tether in CAD), and offsetting between cryptoasset/fiat currency pairs or cryptoasset/cryptoasset pairs is not permitted.
 - c. The supervisory factor for all cryptoasset/fiat currency pairs and all cryptoasset pairs will be set at 40% for G1b cryptoassets and 50% for group 2a and 2b cryptoassets.
 - d. The options volatility amount for groups 1b, 2a and 2b taken together will be set at 150% with a correlation factor of 50% for indirect exposures and 100% for direct exposures.
 - e. The calculation of the adjusted notional will be set to the cryptoasset’s notional expressed in the domestic fiat currency of each deposit institution. For the case of a cryptoasset priced in another cryptoasset, the larger of the two adjusted notionals will apply.
 - f. The calculation of the supervisory delta adjustment and the maturity factor will be the same as for the other asset classes.

¹⁷ Netting is calculated in the same manner as for the PFE in paragraph 30(ii) b.

- g. The aggregation of the hedging sets PFE add-ons of the Crypto class will be the same as for the other asset classes by summing up.

6.3. Capital treatment of market risk

31. The deposit institution must apply the market risk framework set out in Chapter 9 of the Capital Adequacy Guideline to determine the market risk capital treatment of their cryptoasset exposures. Use of the internal models approach for these exposures is not permitted.
32. The AMF expects the deposit institution with cryptoasset exposures to take into account the following elements as part of its decision-making process and risk management of these exposures:
- (i) The ability to trade on regulated markets or registered trading platforms; trading volumes and capitalization; timing and settlements of transactions across markets and platforms; data availability including historical periods of stress and alternative calibration methods if such data is unavailable; and the existence of a liquid two-way market.
 - (ii) The reliability and effectiveness of hedging and netting arrangements including conservative approaches that address any potential limitations in such arrangements (e.g., uncertain correlations in periods of stress and high volatility).
 - (iii) Netting and hedging are recognized between G1a cryptoassets and the traditional assets they digitally represent, and both must be mapped to the same risk class.
 - (iv) Netting and hedging are recognized between G1b cryptoassets and the traditional assets they digitally represent, and both must be mapped to the same risk class.
 - (v) The hedging or diversification benefits must only be considered between instruments referencing the same cryptoasset.
 - (vi) Open unhedged exposures (G1a and G1b) that are outside any hedging relationship with offsetting transactions must receive a 100% capital charge.
33. For G2 cryptoassets, only G2a cryptoassets that meet the hedging recognition criteria (conditions 8, 9, 10) may be offset. When consolidated, positions for each G2a cryptoasset in different markets or on different platforms must not be offset, meaning those sensitivities will be calculated as separate long and short gross consolidated positions.

34. For a deposit institution that uses the simplified standardized approach (“SSA”),¹⁸ the following considerations apply:

(i) For each G2A cryptoasset, a net position must be determined based on the following formula:

$$\text{Net position}_k = \text{Max}(\text{Long position}_k, |\text{Short position}_k|) - 0.65 \times \text{Min}(\text{Long position}_k, |\text{Short position}_k|)$$

(ii) The capital requirement for position risk of a G2a cryptoasset will be 100% of its respective net long position. Net short positions are prohibited. The total capital requirement for position risk consists of the simple sum of all G2a cryptoassets capital requirements.

All other instruments that reference G2a cryptoassets are subject to the capital requirements that apply to G2b cryptoassets.

35. For each G2b cryptoasset to which it is exposed, the deposit institution must deduct an exposure amount from Tier 1A capital.

6.4. Credit Valuation Adjustment risk

36. A deposit institution that is required to determine capital requirements for the credit risk adjustment (CVA) risk must use the framework in Chapter 8 of the Capital Adequacy Guideline for its cryptoasset exposures.

37. The institution must use the basic approach to determine capital requirements for CVA risk unless it was authorized by the AMF to use the standardized approach.

38. G1 cryptoassets must generally be subject to the same rules to determine capital requirements for CVA risk as non-tokenized traditional reference assets.

39. Use of the standardized approach is not permitted for derivatives and securities financing transactions referencing G2 cryptoassets.

6.5. Capital requirements for technological infrastructure risk

40. The technological infrastructure on which cryptoassets are based, such as distributed ledger technology (DLT), is still relatively new and may pose various additional risks even in cases where the cryptoassets comply with the Group 1 classification conditions. The AMF may, at its discretion, impose a capital add-on for infrastructure risk for all exposures to G1 cryptoassets. This infrastructure risk add-on will initially be set at zero and may be increased based on any observed weakness in the technological infrastructure on which a given G1 cryptoasset is based.

¹⁸ Use of the SSA for market risk is still possible until 2024 under the Capital Adequacy Guideline, after which time deposit institutions will have to use the standardized approach.

6.6. Capital requirements for operational risk

41. A deposit institution with direct or indirect exposures to any form of cryptoasset must meet the requirements for operational risk described in Chapter 7 of the Capital Adequacy Guideline.
42. The decision to hold cryptoassets (either under trading or banking book) and provide services to cryptoasset operators must be fully consistent with the deposit institution's risk appetite¹⁹ and strategic objectives as set down and approved by the board.
43. The AMF may impose additional capital charges on a deposit institution for risks that the AMF deems relevant and that are not sufficiently captured under the minimum capital requirements for operational risk.

6.7. Leverage ratio requirements

44. Cryptoasset exposures are included in the leverage ratio exposure measure consistent with the leverage ratio standards in Annex 1-IV of the Capital Adequacy Guideline.
45. Cryptoasset exposures are included in the leverage ratio exposure measure according to their value for financial reporting purposes, based on applicable accounting treatment for exposures that have similar characteristics.
46. For off-balance sheet exposures, the relevant credit conversion factor set out in the leverage ratio framework will apply in calculating the exposure measure.

6.8. Cryptoasset exposure limits

47. Total gross positions²⁰ across Group 1b, 2a and 2b cryptoassets must generally be less than or equal to 1% of Tier 1 capital and must not exceed 2% of the financial institution's Tier 1 capital.
48. Breaches of the Group 1b, 2a and 2b exposure limit threshold of 1% should not occur and the financial institution must have arrangements in place to ensure compliance with the limit. Any breach that does occur must be communicated immediately to the AMF and must be rapidly rectified. Until compliance with the 1% limit is restored, the deposit institution's exposures that are in excess of the threshold must be treated as Group 2b exposures. If the financial institution's exposures exceed 2% of its Tier 1 capital, all Group 1b, 2a and 2b cryptoasset exposures must be treated as Group 2b cryptoasset exposures.
49. Short positions have unlimited risks. Net short positions in a cryptoasset are prohibited. Short positions in a cryptoasset must not exceed 0.1% of Tier 1 capital for category II and III Small and Medium-sized Deposit Institutions ("SMDIs"), as defined in the Capital Adequacy Guideline.

¹⁹ The AMF expects such risk management to be consistent with the principles set out in the [Integrated Risk Management Guideline](#)

²⁰ For the purposes of calculating total gross exposure, gross positions are defined as the greater of the absolute value of the long and short positions in each separate cryptoasset to which the institution is exposed. Derivative exposures must be measured using the equivalent methodologies in Chapter 9.

7. Liquidity requirements for deposit institutions

50. The deposit institution's cryptoasset exposures must be treated in accordance with the Liquidity Adequacy Guideline while taking into account the elements in paragraphs 51 to 53.
51. G1a cryptoassets that reference high quality liquid assets ("HQLA") may qualify as HQLA provided that both the cryptoasset and the equivalent non-tokenized traditional asset possess the HQLA characteristics set out in the Liquidity Adequacy Guideline.
52. Group 1b, 2a and 2b cryptoassets do not qualify for recognition as liquid assets or liabilities (HQLA).
53. The liquidity coverage ratio, net stable funding ratio and net cumulative cash flow liquidity requirements are described as follows:
 - (i) For cryptoasset exposures reported as assets on the deposit institution's balance sheet:
 - G1a cryptoasset exposures reported as assets are subject to treatments similar to those provided for equivalent non-tokenized traditional assets under the requirements of the Liquidity Adequacy Guideline, taking into account any additional liquidity risk from these cryptoassets (based on the earliest available maturities).
 - Group 1b, 2a and 2b cryptoasset exposures reported as assets do not contribute any value in terms of liquidity and are therefore subject to a run-off rate of 100%, a liquid assets inclusion rate of 0% (no recognition as liquid assets) and a required stable funding factor of 100%.
 - (ii) For cryptoasset exposures reported as liabilities on the deposit institution's balance sheet:
 - G1a cryptoasset exposures reported as liabilities are subject to treatments similar to those provided for liabilities of non-tokenized traditional instruments under the Liquidity Adequacy Guideline, while taking into account any additional liquidity risk from these cryptoassets.
 - G1a cryptoasset exposures reported as liabilities must not be recognized as stable retail deposits.
 - Group 1b, 2a and 2b cryptoasset exposures reported as liabilities must not be recognized as stable funding. They must be subject to a run-off rate of 100% and an inclusion rate of 0% as available stable funding (ASF factor).
 - Any other exposures must be treated as an exposure to financial institutions and banks.

8. Requirements for insurers

8.1. Group 1a

54. For capital treatment purposes, the insurer's G1a cryptoasset exposures are subject to the same rules as those that apply to the equivalent non-tokenized traditional assets under CARLI and the MCT.²¹ Accordingly, G1a cryptoasset exposures must be reported according to the same rules as for the equivalent non-tokenized traditional assets in the CARLI and MCT forms.
55. The capital treatment of a cryptoasset in this group is determined by summing the various risks calculated as if the insurer were holding the equivalent traditional asset, plus any add-on imposed by the AMF for technology infrastructure risk (see 8.5 Capital requirements for technological infrastructure risk).

8.2. Groups 1b, 2a and 2b

56. For each separate cryptoasset to which it is exposed, other than those in G1a, the insurer must deduct 100% of the exposure from Tier 1 capital (life and health insurance) or from available capital (property and casualty insurance). The cryptoasset exposures deducted from capital (G1b, G2a and G2b) must be reported as intangible assets in the quarterly CARLI report and must be reported as other assets in the tables relating to available capital in the MCT returns.
57. For products with characteristics that increase risk exposure to more than 100% of the investment, the increase in exposure is considered entirely attributable to cryptoassets, even for partial exposures, and should be deducted in the same manner as the base exposure, namely deduction of 100% of the exposure from Tier 1 capital (life and health insurance) or from available capital (property and casualty insurance).

Example 1: The insurer holds a \$100 savings contract that is invested entirely in cryptoassets, with a minimum return guarantee of 3% over the term of the contract. The deduction would be \$103 (i.e., $\$100 * (100\% + 3\%)$).

Example 2: The insurer holds a \$100 segregated fund contract, 25% of which is invested in cryptoassets and 75% in stocks, with a reset option. The reset option has been exercised and the guaranteed value of the contract has increased to \$120. The deduction related to the cryptoassets would be \$45 (i.e., the base amount of $\$100 * 25\%$ plus the guaranteed amount of \$20).

8.3. Groups 1a, 1b, 2a and 2b

58. With the exception of Group 2b, long positions may be offset with short positions in the same cryptoasset to reduce risk exposure.
59. Only G2a cryptoassets that meet the hedging recognition criteria (criteria 8, 9, 10) can be offset. When consolidated, positions for each Group 2a cryptoasset in different markets or platforms must not be offset, meaning that sensitivities to

²¹ For example, a tokenized bond will be subject to the same risk weighting as an equivalent non-tokenized corporate bond. Similarly, a tokenized deposit will be subject to the same treatment as an equivalent traditional deposit.

market risk factors (i.e., Greeks) will be calculated as separate long and short gross consolidated positions.

60. The capital requirements in relation to the various risks as well as the exposures to be deducted are calculated after reduction for registered reinsurance,²² in accordance with the applicable treatment and conditions under CARLI and the MCT.
61. No diversification credits are given for cryptoasset investments.

8.4. Cryptoasset exposure limits

62. Total gross exposure²³ to cryptoassets in Groups 1b, 2a and 2b must generally be less than or equal to 1% of Tier 1 capital (life and health insurance) or available capital (property and casualty insurance).
63. Breaches of the Group 1b, 2a and 2b exposure limit threshold of 1% should not occur and the insurer must have arrangements in place to ensure compliance with the limit. Any breach that does occur must be communicated immediately to the AMF and must be rapidly rectified. Until compliance with the 1% limit is restored, the insurer's exposures that are in excess of the threshold must be treated as Group 2b exposures. If the insurer's exposures exceed 2%, all Group 1b, 2a and 2b cryptoasset exposures must be treated as Group 2b cryptoasset exposures.
64. Short positions carry unlimited risk of loss. Holding net short positions in a cryptoasset is prohibited.

8.5. Capital requirements for technological infrastructure risk

65. The technological infrastructure on which cryptoassets are based, such as distributed ledger technology (DLT), is still relatively new and may pose various additional risks even in cases where the cryptoassets comply with the Group 1 classification conditions. The AMF may, at its discretion, impose a capital add-on for infrastructure risk for all exposures to G1 cryptoassets. This infrastructure risk add-on will initially be set at zero and may be increased based on any observed weakness in the technological infrastructure on which a given G1 cryptoasset is based.

²² Unregistered reinsurance is not currently recognized in the treatment of cryptoasset exposures.

²³ For the purpose of calculating total gross exposure, gross positions are defined as the largest absolute value of long and short positions.

Appendix 1: Redemption risk test

1. To be considered effective for the purposes of applying the G1b classification conditions, a cryptoasset with a stabilization mechanism must pass the redemption risk test. The objective of this test is to ensure that the reserve assets are sufficient to enable the cryptoassets to be redeemable at all times, including during periods of extreme stress, for the peg value.
2. To pass the redemption risk test, the financial institution must ensure that the stabilization mechanism meets the following conditions:
 - (i) *Value and composition of reserve assets*: The value of the reserve assets (net all non-cryptoasset claims on these assets) must at all times, including during periods of extreme stress, equal or exceed the aggregate peg value of all outstanding cryptoassets. If the reserve assets expose the holder to risk in addition to the risks arising from the reference assets, the value of the reserve assets must sufficiently overcollateralize²⁴ the redemption rights of all outstanding cryptoassets. The level of overcollateralization must be sufficient to ensure that even after stressed losses are incurred on the reserve assets, their value exceeds the aggregate value of the peg of all outstanding cryptoassets.
 - (ii) *Quality of reserve assets*: For cryptoassets that are pegged to one or more currencies, the reserve assets must be comprised of assets with minimal market and credit risk. The assets shall be capable of being liquidated rapidly with minimal adverse price effect. For example, these assets may be defined as Level 1 HQLA as stipulated in section 2.2.1.4 of the Liquidity Adequacy Guideline. Further, reserve assets must be denominated in the same currency or currencies in the same ratios as the currencies used for the peg value. A de minimis portion of the reserve assets may be held in a currency other than the currencies used for the peg value, provided that:
 - a. the holding of such currency is necessary for the operation of the cryptoasset arrangement; and
 - b. all currency mismatch risk between the reserve assets and peg value has been appropriately hedged.
 - (iii) *Management of reserve assets*. The governance arrangements relating to the management of reserve assets must be comprehensive and transparent. In particular, they must ensure that:
 - a. The reserve assets are managed and invested with an explicit legally enforceable objective of ensuring that all cryptoassets can be redeemed promptly at the peg value, including under periods of extreme stress.
 - b. A robust operational risk and resilience framework exists to ensure the availability and safe custody of the reserve assets.
 - c. A mandate that describes the types of assets that may be included in the reserve must be publicly disclosed and kept up to date.

²⁴ The level of overcollateralization must be agreed upon in advance with the AMF.

- d. The composition and value of the reserve assets are publicly disclosed on a regular basis. The value must be disclosed at least daily and the composition must be disclosed at least weekly.
- e. The reserve assets are subject to an independent external audit at least annually to confirm they match the disclosed reserves and are consistent with the mandate.