GBBC Digital Finance

Code of Conduct

Part VI: Principles for Stablecoin Issuers

This document must be read in conjunction with the Code of Conduct Overarching Principles and the Key Considerations for Stablecoin and Stablecoin Issuers document.

Readers are reminded that the term "stablecoin" references a variety of coin structures, more details of which are set out in the Key Considerations for stablecoin and stablecoin issuers document. stablecoin is not always stable and may only be stabilised in one or more ways, which may or may not be effective. All market participants are reminded of the necessity of focusing on the substance of any cryptoasset, rather than labels, in order to properly understand its function.

It is recognised that dependent on the underlying structure of a stablecoin, principles outlined in other GDF codes of conduct will also apply, for example, i) security tokens ii) custody, iii) token issuance etc – see www.gdf.io for current GDF codes. To avoid duplication these principles will not be covered in this document.

1. Compliance with Existing Laws

a. We understand that even if a token falls outside the remit of financial laws, that we remain subject to all other existing laws, including as noted in the Overarching Principles consumer protection laws. Therefore, we will seek to abide by the Additional Principles set forth below.

b. Where we are aware that our activities are governed by existing rules and regulations, we will take all reasonable measures to comply with applicable laws, rules or regulations.

   i. A stablecoin pegged to a fiat currency may be required to adhere to laws governing safekeeping and settlement of fiat currency.

   ii. However, if pegged to a digital asset or some other underlying asset, the regulatory requirements may be different.

c. We will ensure we comply with all local legal and regulatory requirements concerning consumer protection laws, such as conflict resolution, safekeeping of customer assets.

d. We will comply with any and all potential regulatory requirements, including those concerning deposit-taking, e-money, and financial instruments.

2. Pricing and Valuation

a. We will ensure appropriate pricing and valuation policies are in place depending on the structure of the stablecoin as follows:

   i. Principles for fair direct pricing based on liquid assets (e.g. 1:1 fiat backed coins); or

   ii. Principles for fair indirect pricing for stablecoins using a fiat reference point but which are collateralised using a more structured approach; or

   iii. Principles for accurate valuation and fair pricing for stablecoins using a collateral reference point for valuation; or

b. Principles for fair pricing of Algorithmic stablecoins which must consider the following:

   i. Clear and concise explanations of the different factors that influence the pricing mechanism, including controls and incentives that mitigate price manipulation.

   ii. Appropriate level of support for the pricing mechanism sufficient to maintain user confidence.

   iii. Steps that will be taken to identify and address undermined confidence compromising the algorithms ability to maintain the price stability.

3. Issuance and Redemption

We will have appropriate arrangements in place to govern:

a. Key Operational Functions for Ongoing Issuance – Identification and maintenance of key operational functions underlying the stablecoin structure that will keep the stablecoin in existence and operational for ongoing issuance, including the following (whether internally arranged or externally sourced):

- methodology for obtaining appropriate pricing and valuation information from external pricing sources or oracle(s) (including replacement of sources where necessary);

- technical support and engineering for the stablecoin model and relevant smart contracts;
- treasury function, including cash management, collateral management and accounting and liquidation (see also further below regarding redemption);
  1. To the extent that change of type of collateral is allowed by the governing documents of the stablecoin, we will put robust procedures in place around the decision to change the type of collateral backing the stablecoin, including established policies on how participant-proposed changes will be handled.

iv. compliance arrangements to maintain appropriate overview of stablecoin issuance structure, including observance over minting and burning practices, pricing, valuation, collateral maintenance, technology development, security, and all other key operational functions for confidence in ongoing future issuance;

v. specific audit function to provide dynamic, near real-time monitoring and attestment of the outstanding token supply, and in cases where the outstanding token supply is not trivially determined or otherwise self-evident, we would ideally involve a third party to audit methodology and/or results in this regard; and

vi. in the event that a rating is sought or has been obtained for the stablecoin, Issuers should refer to GDF Code of Conduct Part V – Principles for Token Comparison and Rating Websites.

b. **Special considerations for algorithmic structures** – Specifically in the case of algorithmic stablecoin issuers, we will regularly review the ongoing accuracy and validity of the algorithm and potential risks arising from the value support structure which the algorithm maintains. We acknowledge that fully algorithmic stablecoins do present a higher probability of failure than asset-backed coins due to a black swan event. Purely algorithmically stabilised projects – which do not have the backing of any form of collateral – rely solely on the continued confidence of users in the system to maintain stability. If enough of that confidence is undermined or lost then, at a certain point it is understood that the algorithm will simply not be able to maintain the stability of the token and the project will fail. We will maintain appropriate risk management, such as automatic liquidation upon specified and disclosed triggers, to mitigate the potential impact of such events.

c. **Redemptions** – We will implement appropriate policies and procedures to ensure that redemptions function in the manner set out in the terms applicable to the stablecoin and disclosed to users including:

- policies covering the main aspects of redemption including presentation of stablecoin, timeframes for settlement and any client identification requirements (e.g. KYC and AML procedures that must be passed prior to pay out); and
- policies to address redemption and settlement risk (see also sections in this code in relation to Pricing and Valuation, Market Integrity and Liquidity and Fraud).

d. **Bankruptcy and Distress** – With regard to potential bankruptcy and distress, we:

- will have a capital adequacy statement in place that states how much capital the company will maintain to ensure the safety of the issue assets;
- will implement and maintain policies and procedures concerning the protection of client assets in case of financial distress;
- acknowledge that to the extent possible, client assets should not be commingled with company assets;

e. **Client assets** – Where segregation of assets is implemented, we will have the quality and strength of that segregation arrangement be attested by way of certified account structure, legal opinion or other verification procedure;

f. **Fees** – In the event of a decision to increase fees associated with transactions in the stablecoin, we will use reasonable efforts to disseminate information regarding the proposed fee increase to existing users (including details of amounts and the proposed effective date) and will offer a reasonable period for redemption by existing users at par before the new fee terms become applicable.

4. Market Integrity & Liquidity Risk

a. Market and Liquidity Risk – structural mitigation

i. to mitigate secondary market liquidity risk, we will endeavour to make an efficient two-way market in our stablecoins at any time, in particular in times of distress;

ii. we can provide this liquidity to all market participants, or only to selected dealer market participants, provided the latter commit to pass this liquidity on to the rest of the market; and

iii. in case the stablecoin is linked to illiquid assets where a tight market price is not available at all times, we acknowledge that it is advisable that this liquidity is not provided in cash but in kind, i.e. the issuer delivers the underlying assets.

b. Market and Liquidity Risk – policy and procedure mitigation

i. We will establish policies and procedures addressing the specific liquidity risk of the applicable collateral assets – i.e. to identify appropriate liquidity factors, monitor these factors and to provide procedures that will be implemented if the collateral assets' value cannot readily be realised (including for purposes of funding redemptions) or, where applicable, delivered in kind.

ii. We will develop or otherwise obtain and run risk models on an on-going basis that determine the level of subordination required to prevent market risk, and have policies and procedures in place identifying how to deal with market moves that erode the subordination.

iii. We will publicly disclose our issuer risk model methodology and target confidence risk levels.

c. Market and Liquidity Risk – special considerations for structures with collateral counterparties

i. If we issue stablecoins that are asset-backed (as opposed to fiat-backed or algorithmic, please refer to Key Considerations document for more information) with non-physical underlying, we acknowledge we may have additional counterparty risk connected with the collateral.

   1. *Example: "synthetic ETF" style stablecoin that is linked to say oil, but where the collateral is held in bonds, and there is a counterparty that is providing a swap, swapping out the bond risk against oil risk.*

ii. Where this applies, we will also:

   1. establish policies to ensure that adequate consideration has been given to the *wrong-way-risk* of the counterparty holding the collateral assets being adversely affected by events that impact on its ability to perform on its obligations;
   2. execute swaps under ISDA agreements with reputable institutions wherever possible, with an adequate margining policy in place; and
   3. have a treasury function which is capable of dealing with margin calls in times of distress (in particular, we will implement policies and procedures to ensure that missing margin payments are identified and addressed in a timely manner).

5. Disclosures; Terms and Conditions

a. Disclosure and information

i. We will provide clear disclosure on the underlying structure of the stablecoin to enable users to understand the functions, procedures (for example in relation to issuance and redemption), valuation policy and surrounding risks.

ii. We will take reasonable steps to provide inter alia:

   1. Clear Information on liquidity
   2. Clear information on fees and spreads
   3. Details of where assets are stored / located
   4. Provide and keep an updated list of 'authorised' exchanges and resellers, if the offer, sale, and trade of said stablecoin is regulated
   5. Information on the provider including a link to the regulatory page (EXAMPLE)
   6. Clear policy on the handling and storage of customer data

iii. If we issue asset-backed stablecoins, we will disclose the value and types of assets held in a manner that allows customers to understand whether the assets are sufficient to cover the outstanding liabilities including during times of distress.

b. Terms and conditions

- We will provide easy access to the terms and conditions for our stablecoin issuance, the terms and conditions will be written in a language which is accessible and straightforward. We acknowledge that our terms and conditions form the basis for the legal relationship with our users.
- We will give due consideration to situations where we believe amendments may be required and any amendments that are made will be proportionate to the issues that they seek to solve. In situations where amendments may be reasonably considered adverse to the interests of the stablecoin users, we will use reasonable efforts to disseminate information regarding the proposed changes to existing users and will offer a reasonable period for redemption by existing users at par before the new terms become applicable.

c. Policies

- We will have policies and procedures in place to ensure that our disclosures, the presentation and content of our terms and conditions, process around and content of any amendments to our terms and conditions and all customer communications are deemed fair and proper and we will provide appropriate risk warnings where applicable and advance notice of changes wherever possible.

6. Customers

a. Know your Customer

i. Where applicable (please refer to the separate Code in relation to AML and KYC to understand more details on applicability of AML / KYC), we will undertake the necessary checks on customers, and make customers aware that these checks will be undertaken. These checks may include but are not limited to:

1. Know Your Customer (KYC)
2. Anti Money Laundering (AML)
3. Politically Exposed Persons (PEP)
4. Counter-Terrorist Financing (CTF)

b. Customer Funds and Custody

i. The principles set out in the GDF Custody Code are relevant in relation to the appointment and oversight of custodians for stablecoin assets.

ii. We will have policies and procedures in place describing how the stablecoin assets are held in custody and who are the beneficial owners.

iii. If a stablecoin is backed by an asset, and the asset itself is held, we will hold the assets in custody pursuant to regulatory and industry best practices regarding asset safekeeping and business contingency.

1. If we are providing custody of client assets in a decentralised manner, we will do so in a manner that promotes confidence in the decentralisation of asset custody. This includes, but is not limited to, high levels of ongoing diligence to ensure that there is no central point of failure among custodians, or exploits in smart contracts that could affect the underlying assets' liquidity.

iv. Where appropriate, we will implement governance and technical structures surrounding control and security of the keys related to update of the stablecoin smart contract to address risks concerning inter alia:

1. the loss, destruction, or corruption of private keys; and
2. adequate checks and balances including separation of powers to avoid any single individual having undue control over the underlying contract address private keys.

- To the extent possible private keys relating to authentication and deployment of the underlying smart contract should be held in a manner consistent with the GDF Custody Code.

c. Conflict Resolution

- We will put in place a clearly documented and communicated complaints procedure, detailing how a customer can make a complaint and to whom a complaint should be addressed (e.g. to the issuer or the seller / exchange).

7. Governance

a. General Governance Principles

i. We will ensure that all of our policies and procedures are regularly reviewed and updated as necessary will monitor our performance against these policies and procedures.

ii. We will maintain a register of all incidents, and the incident register will be periodically reviewed.

iii. Where regulatory frameworks exist, we will fully comply with all requirements defined within the regulatory perimeter.

b. Technology

i. We will consider, based on reasonably available information (and with respect to private platforms, as may be supplemented by responses to appropriate due diligence) the overall strength and resilience of the underlying blockchain platform that we are using, with a view to issuing stablecoin using resilient systems and mitigating technology risk.

ii. For public blockchains we will evaluate on an ongoing basis:

1. the risk of a compromise / attack of the underlying blockchain, particularly those based on proof-of-work or proof-of-stake consensus.
2. the risk of hard forks and resulting potential contention and other associated risks.

iii. For private blockchains we will monitor on an ongoing basis the fundamental consensus algorithm (e.g. proof-of-authority, proof-of-stake) and identify and mitigate primary factors involving potential compromises and attack vectors.

iv. We will appropriately test and approve all code changes and patches before they are deployed within the production blockchain.

v. We will put in place a documented process to ensure that all smart contract code changes are approved by an authorised individual.

vi. We will undertake a regular review of the underlying blockchain API and mechanism through which the smart contract interacts as the blockchain updates or modifies those mechanisms, particularly if the change necessitates a hard fork of the underlying blockchain.

c. Reconciliation and Audit

i. We will establish, implement and maintain an audit plan to examine and evaluate the adequacy and effectiveness of our systems, internal control mechanisms and arrangements;

ii. For asset backed stablecoins, we will submit to regular financial audits to confirm that we maintain sufficient underlying assets to cover our outstanding liabilities.

iii. We will ensure that we have sufficient assets to match the capital utilised for an asset-backed stablecoin.

iv. We will ensure that our Algo backed smart contracts have protections in place to demonstrate the resilience in pricing mechanism(s).

v. We will implement regular audits of changes to the stablecoin smart contracts, undertaken by an independent third party, including a technical audit.

vi. We will maintain an auditable log of all smart contract code updates and ensure that a continuous audit trail of changes exists.