title: GHO Facilitator Onboarding Process and Application

author: @oneski22, @khan

description: A process for prospective GHO Facilitators to apply to be onboarded into the GHO deployment operated by the

Aave DAO

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Abstract

This proposal aims to enact a new governance process by which interested parties may apply to the Aave DAO to have addresses be onboarded as GHO Facilitators. The authors propose a process by which interested parties publish an application to the Aave Forum (governance.aave.com), after a period of discussion and comment, an offchain vote is taken using Snapshot. Should that temperature check vote be successful, an on-chain vote targeting the Aave DAO Short Executor will formally add the address and its initial cap to the GHO system as a facilitator. This post outlines the process in detail, an addition includes 2 sample applications for each of the facilitators Aave Companies has released publicly, Aave V3 & Flash Minter.

Motivation

The GHO Stablecoin Protocol will be governed by the Aave DAO, specifically the Aave DAO Short Executor. There are 3 new processes that the Aave DAO will need to implement:

- · a process for facilitator onboarding
- · a process for adjustment of a facilitator limit
- a process for facilitator offboarding.

This document only intends to address the first of these processes.

Implementation

The Facilitator onboarding process will begin with a post on the Aave Governance Forum <u>(overnance.aave.com)</u> conforming to the template below. Next, a 7 day discussion period will commence for the community to ask questions. After the discussion period a snapshot temperature check can be posted on Snapshot. The standard snapshot process with an informal quorum of 320,000 votes is suggested to ensure sufficient community input is received and to keep consistency with existing governance processes. Should the temperature check be successful, another discussion period of 7 days will commence for the community to further refine the proposal. The authors hope that during this second period technical and risk contributors especially provide feedback on the proposed facilitator design, terms of the credit line and the initial GHO limit being requested. Following this second discussion period, an on-chain proposal targeting the Aave DAO Short Executor can then be posted via the Aave DAO Governance contracts to formally on-board the facilitator with its initial GHO limit.

Specification

FOR - Adopt this process for onboarding GHO Facilitators

NAE - Do not adopt this process for onboarding GHO Facilitators

ABSTAIN - Abstain

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Facilitator Application Template

Background

- 1. Title of Facilitator
- 2. High Level Description of Mechanism / Request
- 3. Author / Link to License

- 4. Link to whitepaper (if applicable)
- 5. How Facilitator Futhers GHO
- 6. Organization / DAO responsible for operation of the Facilitator (if applicable)
- 7. History, Details, Background of the operator of the Facilitator (if applicable)

Credit Line Details

1. Requested Facilitator Cap

Cap Increase Roadmap (if applicable)

- 1. Use of Funds
- 2. Revenue Streams
- 3. Revenue Split / Interest Terms
- 4. Collateral Posted
- 5. Other Commercial Details/Considerations

Mechanism & Risk Details

- 1. Detailed Description of the Facilitator
- 2. How Facilitator is backing GHO
- 3. If RWA description of legal structure etc
- 4. Detail any / all risks (Oracle risk, Third-party Dependencies, Contract risk, Cross-chain, Bridging, Regulatory, etc) as well as any prevention/mitigation methods

Governance Controls

- 1. List of controls given to Aave DAO
- 2. Controls given not to Aave DAO
- 3. Alternative controls / roles that may be present but not set (optimistic governance? Risk Admin? SubDAO etc) + description on who can set these roles
- 4. Upgradability controls

Facilitator Code and Documentation

- 1. Code Repository
- 2. Audit Report (optional but strongly recommended)
- 3. Documentation
- 4. Non-technical explainer
- 5. License Details

EXAMPLES

Facilitator Application: Aave V3 Ethereum Market

Background

- 1. Title of Facilitator: Aave V3 Ethereum Market
- 2. High Level Description of Mechanism / Request: Onboarding GHO as a borrow only currency in the Aave V3 Ethereum

Market, using the same collateralization/liquidation mechanics as any other asset type in Aave V3. The borrowed GHO will be sourced from the Facilitator Credit Line, with an interest rate set by the Aave Short Executor and an initial cap of XX,000,000 GHO.

- 3. Author / Link to License: Aave Companies, MIT License
- 4. Link to whitepaper (if applicable): GHO Techpaper
- 5. How Facilitator Futhers GHO:
- 6. Organization / DAO responsible for operation of the Facilitator (if applicable): The Aave DAO and its various subcontractors will operate and manage the Aave V3 Ethereum Market Facilitator.
- 7. History, Details, Background of the operator of the Facilitator (if applicable): The Aave DAO is the second largest credit issuer in DeFi by operating several deployments of the Aave Protocol across 5 networks.

Credit Line Details

- 1. Requested Facilitator Cap: XX,000,000 GHO
- 2. Use of Funds: The GHO Credit line will be used to allow Aave V3 Ethereum users the ability to borrow GHO against their collateral pledged on the Aave V3 Ethereum Market.
- 3. Revenue Streams: Interest earned from borrow positions and liquidation bonuses accrued from poorly managed positions.
- 4. Revenue Split / Interest Terms: This facilitator is owned and operated by the Aave DAO, 100% of all revenue will go to the Aave DAO Treasury
- 5. Collateral Posted: The Aave DAO will not be posting any collateral directly to back this credit line, and GHO issued to users via the Aave V3 Ethereum Market is over collateralized at all times by various assets according to the configurations and risk settings of the Aave V3 Ethereum Market.
- 6. Other Commercial Details/Considerations: n/a

Mechanism & Risk Details

- 1. Detailed Description of the Facilitator: The proposed facilitator will enable the addition of GHO to the Aave V3 Ethereum Market as a borrow only currency, the supply side will be exclusively provided by the facilitator. GHO will be eligible for borrow using the same logic as other Aave V3 Assets, collateral is deposited, and allowed to be used to back some value of borrow positions of a lesser total value, according to various risk parameters. Interest is accrued to the borrow position, which adds to the total debt, that is eventually repaid when the borrow position is closed out. Should the value of the collateral drop below certain risk parameter defined thresholds, the position will be eligible for liquidation, which allows liquidators to seize some or all of the collateral in exchange for closing the borrowed position.
- 2. How Facilitator is backing GHO: The facilitator is backing GHO using the collateral positions opened by each user borrowing GHO on the Aave V3 Ethereum market. These positions are strictly over-collateralized with exact parameters being adjusted by various risk teams in response to the ever changing market. As of the time of application the following tokens will be able to be used as collateral to open a GHO borrow positions: DAI, USDC, (w)ETH, wstETH, cbETH, rETH, WBTC, LINK, & AAVE.
- 3. If RWA description of legal structure etc: n/a
- 4. If other dependencies, please describe: The Aave V3 Ethereum Market has a dependency on 3rd parties to perform liquidations to ensure borrow positions remain a healthy collateralization ratio, as well as a relatively active governance to periodically adjust various risk parameters in response to changing market conditions.
- 5. Detail any / all risks (Contract Risk, Cross-chain, Bridging, Regulatory, etc):
- 6. Bad Debt While the Aave DAO and its risk contributors do their best to constantly adjust risk parameters and other levers to enable only healthy borrow positions to be opened and maintained on the platform, no credit issuance is without risk of potential default, especially in the highly volatile world of crypto assets. Should large and rapid price movements occur, there is a possibility that a collateral position is not liquidated in a manner that covers all borrowed GHO, leaving a shortfall. To date total bad debt on Aave has been a small fraction of its yearly revenue, and all has historically been covered by DAO reserves.
- 7. Governance The Aave DAO is governed by its token holders, should a malicious party acquire a sufficient amount of Aave Tokens they would be able to pass governance proposals that negatively impact the Aave V3 Ethereum Market, and the GHO issued by its attached facilitator. All governance actions must go through a timelock and can be canceled by the Guardian multisig, providing defense against this attack vector.

- 8. Smart Contract Failure Smart contracts are not perfect and while the Aave V3 Protocol, and the Aave V3 Ethereum Facilitator have been audited by multiple top firms, there is still the possibility of some software flaw leading to loss in the system.
- 9. Oracle Issue The Aave Protocol relies on oracles to report the price of the various assets that are used for both collateral and borrowing in order to properly execute the necessary calculations for normal operation of the protocol. Presently all assets use oracles provided by Chainlink
- 10. 3rd Party Liquidators The Aave V3 Ethereum Market has a dependency on 3rd parties to perform liquidations to ensure borrow positions remain a healthy collateralization ratio, as well as a relatively active governance to periodically adjust various risk parameters in response to changing market conditions.
- 11. Please include links to supporting docs: https://docs.aave.com

Governance Controls

- 1. List of controls given to Aave DAO: The Aave DAO retains full control over the Aave V3 Ethereum Market, and therefore will have full control over the facilitator.
- 2. Controls given not to Aave DAO: n/a
- 3. Alternative controls / roles that may be present but not set (optimistic governance? Risk Admin? SubDAO etc) + description on who can set these roles: Aave V3 has several additional roles that can be set. Guardian, which has the ability to freeze the Aave V3 Ethereum Market. Risk Admin, which has the ability to adjust risk parameters at any time. Listing Admin, which has the ability to add new assets to the market. At this time, the Guardian is set to the Aave DAO Guardian Multisig, which is elected by the Aave DAO. The other roles have yet to be issued, their issuance and revocation is at the discretion of the Aave DAO via the Aave DAO Short Executor.
- 4. Upgradability controls: The Aave DAO Short Executor retains control of the upgradability of the facilitator code.

Facilitator Code

- 1. Code Repository: GitHub aave/gho-core
- 2. Audit Report (optional but strongly recommended):gho-core/audits at main · aave/gho-core · GitHub
- 3. Documentation: Developer Docs | GHO Document Hub
- 4. Non-technical explainer: Borrow GHO | GHO Document Hub
- 5. License Details: MIT License

Facilitator Application: Flash Minter

Background

- 1. Title of Facilitator: Flash Minter
- 2. High Level Description of Mechanism / Request: Use its credit line of GHO to allow users to flash mint arbitrary amounts of GHO, up to the facilitator cap, to conduct various atomic DeFi operations.
- 3. Author / Link to License: Aave Companies, MIT License
- 4. Link to whitepaper (if applicable): GHO Techpaper
- 5. How Facilitator Futhers GHO: Flash minting/loans are a core aspect of DeFi systems, they allow for many automated tools to conduct arbitrage, refinancing and more. Ensuring GHO has this capability is key to keeping the peg stable across many markets, and facilitating the migration of borrow positions to and from GHO and other tokens.
- 6. Organization / DAO responsible for operation of the Facilitator (if applicable): The Aave DAO and its various subcontractors will operate and manage the Facilitator.
- 7. History, Details, Background of the operator of the Facilitator (if applicable): The Aave DAO is the second largest credit issuer in DeFi by operating several deployments of the Aave Protocol across 5 networks.

Credit Line Details

1. Requested Facilitator Cap: XX,000,000 GHO

- 2. Use of Funds: The GHO Credit line will be used to allow users to flash mint up to the facilitator cap in a single atomic transaction.
- 3. Revenue Streams: Fees on flash mints.
- 4. Revenue Split / Interest Terms: This facilitator is owned and operated by the Aave DAO, 100% of all revenue will go to the Aave DAO Treasury
- 5. Collateral Posted: The Aave DAO will not be posting any collateral directly to back this credit line, flash mints must be returned in the same transaction in order to be valid, this ensures that no GHO is entering "effective" circulation without collateral.
- 6. Other Commercial Details/Considerations: n/a

Mechanism & Risk Details

- 1. Detailed Description of the Facilitator: The Flashmint facilitator allows an address to request a flashmint issuance of GHO, on the condition that the GHO in addition to any fees is paid back to the facilitator by the end of the transaction.
- 2. How Facilitator is backing GHO: The flashminter design requires that all minted GHO is burned in the same transaction, since no GHO is effectively entering circulating supply, no backing is needed.
- 3. If RWA description of legal structure etc: n/a
- 4. Detail any / all risks (Contract risk, Cross-chain, Bridging, Regulatory, etc):
- 5. Smart Contract Failure Smart contracts are not perfect and while the Flash Mint Facilitator has been audited by multiple top firms, there is still the possibility of some software flaw leading to loss in the system.
- 6. Please include links to supporting docs: https://docs.aave.com

Governance Controls

- 1. List of controls given to Aave DAO: The Aave DAO retains full control over the facilitator, the only control is changing the flash mint fee, which can be done through the Aave DAO Short Executor.
- 2. Controls given not to Aave DAO: n/a
- 3. Alternative controls / roles that may be present but not set (optimistic governance? Risk Admin? SubDAO etc) + description on who can set these roles: n/a.
- 4. Upgradability controls: n/a

Facilitator Code

- 1. Code Repository: GitHub aave/gho-core
- 2. Audit Report (optional but strongly recommended):gho-core/audits at main · aave/gho-core · GitHub
- 3. Documentation: Developer Docs | GHO Document Hub
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