The following proposal is based on the MIP6 Recommended Guideline Metrics for Onchain Collateral Onboarding and additional observations derived from empirical evidence.

The recommended guidelines already lay a good foundation for on-chain collateral onboarding and touch on the most important aspects of the risk management techniques used to assess a successful integration.

We aim to deepen this holistic framework by focusing on key metrics to ensure successful collateral onboarding. This framework is not intended to give any parameter recommendations but to pre-select collateral that has the potential to be onboarded, which will be further analyzed by BA Labs to provide parameter recommendations to the DAO. This Framework was developed in collaboration with Phoenix Labs and incorporates their current strategy and vision for Spark.

We propose a two-level framework to optimize processes and not waste resources on already-discarded collateral types.

Quantitative Screening

1. Whitelisted Asset Category

Spark's target market is high-scale collateral. Many alternative lending markets serve the long tail of assets. Spark is designed to capture 80% of the market that exists for large-cap tokens and leave the remaining 20% to be served by alternative lenders.

Lessons learned from Maker's collateral onboarding process show that most assets do not have large-scale demand for leverage. This leads us to use a whitelist approach and deny most categories by default.

The following asset categories are whitelisted:

- ETH Liquid Staking Tokens (LSTs)
- BTC Derivatives

This list can be amended for new asset categories that prove scalable demand. Some non-exhaustive examples that show potential are ETH Liquid Restaking Tokens (LRTs), Blockchain Native Tokens, and RWAs.

2. Market Cap & Liquidity

The following minimum constraints are required:

- $1b average market cap of circulating supply over 3 months
- Slippage of less than 5% for orders of 50m USD worth to ETH (Refer to the Appendix - Preliminary Analysis section for a breakdown of how these metrics are calculated)

3. Borrow Demand on Alternative Lending Markets

Aggregate borrow demand for the asset must exceed 50m USD

worth across "Bluechip" lending markets for 2 consecutive months. Please note this is the value borrowed against the asset, not the collateral's value. The borrowed value must be in the assets listed in Spark.

For example, borrowing 20m USDC, 10m USDT and 20m ETH passes this test, but 50m of borrowed UNI does not.

The following lending markets are considered "Bluechip":

- Aave
- Compound

Asset Application

Questions that should be answered and data that should be provided:

- Introduction to the project and proposal
- Linking necessary references
- Whitepaper

- Website
- Docs
- Source Code
- Smart Contracts Addresses
- Social Media
- Whitepaper
- Website
- Docs
- Source Code
- Smart Contracts Addresses
- Social Media
- Relationship between the proposer and the project
- How is the asset adding value to Spark?
- Do you have a projection of demand for borrowing with this collateral?
- What is the potential for demand and project growth?
- What are the main use cases (leverage, liquidity, farming, etc)?
- Is the project prepared to offer some marketing rewards for the suppliers/borrowers of the asset?
- Is the project prepared to use treasury assets to open a debt position?
- Do you have a projection of demand for borrowing with this collateral?
- What is the potential for demand and project growth?
- What are the main use cases (leverage, liquidity, farming, etc)?
- Is the project prepared to offer some marketing rewards for the suppliers/borrowers of the asset?
- Is the project prepared to use treasury assets to open a debt position?
- Decentralized/Centralized:
- If centralized:
- Provide a detailed description and information about the issuing counterparty
- Describe system used to control the asset, including any possible counterparties or systems such as multisig wallets
- Describe permissions and capabilities over the asset
- If relevant: is there proof of funds? If yes, detail how it works.
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- If relevant: is there proof of funds? If yes, detail how it works.
- If Decentralized:
- Describe how system functions and what are the trust assumptions
- Provide data of token holder concentration that can impact the outcome of the underlying protocol
- Describe the emission schedule in case there is one

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- Upgradability:
- If Upgradable:
- Who can make an upgrade?
- Which components are upgradable?
- What is the upgradability design?
- Who can make an upgrade?
- Which components are upgradable?
- What is the upgradability design?
- If Upgradable:
- Who can make an upgrade?
- Which components are upgradable?
- What is the upgradability design?
- Who can make an upgrade?
- Which components are upgradable?
- What is the upgradability design?
- Permissioned/Permissionless:
- If permissioned:
- Who controls the permissions, what are the criteria?

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- If permissioned:
- Who controls the permissions, what are the criteria?
- Who controls the permissions, what are the criteria?
- Regulated/Unregulated
- If regulated:
- Which jurisdiction are they regulated in?
- Who's the regulator?
- What are the legal levies that holders have?
- Which jurisdiction are they regulated in?
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- Who's the regulator?
- What are the legal levies that holders have?
- Has the project been audited?
- Smart contract audit
- Procedural audit (e.g. financial, operational, compliance…)
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- Procedural audit (e.g. financial, operational, compliance…)
- Details about the token oracle
- List the oracles for the token, the providers, their parameters and trust assumptions if necessary with githubs, addresses and any relevant information
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- Detailed report on Trail Of Bits token integration checklist for the token in question

Internal Onboarding Analysis

Profitability

First of all, the collateral onboarding has to be profitable. If the collateral onboarding is not profitable then it does not make sense to further pursue the analysis. What MIP6 proposes is a break-even approach to profitability assessment which we believe to be a strong and robust methodology. BA will assess the profitability of the onboarding collateral through estimates of the following metrics:

- Revenue generated
- Onboarding costs

- Maintenance costs

Stability

Stability involves market dynamics and market microstructure of the collateral considered. The stability aspect of collateral onboarding is again divided into different assessments:

2.1. Market Dynamics

The Market Dynamics part assesses the financial evolution of the collateral over time, as well as its relation with the overall market.

- Market Cap analysis
- Market Cap as % of competitors
- Market Cap absolute growth
- Market Cap growth in relation to competitors
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- Market Cap absolute growth
- Market Cap growth in relation to competitors
- Depegging events
- For stablecoins:
- Depeg from $1 value (frequency, magnitude)
- Reasons
- Depeg from $1 value (frequency, magnitude)
- Reasons
- For LSTs/LRTs:
- Depeg from underlying value (frequency, magnitude)
- Reasons
- Depeg from underlying value (frequency, magnitude)
- Reasons
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- Reasons
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- Reasons
- For LSTs/LRTs:
- Depeg from underlying value (frequency, magnitude)
- Reasons
- Depeg from underlying value (frequency, magnitude)
- Reasons
- Risk dependency
- Correlation/Beta with already held collateral and underlying for redeemable assets.

2.2. Market Microstructure

The Market Microstructure assesses metrics such as:

- Collateral ownership concentration
- Token unlocks
- Vesting schedules
- Presence on exchanges
- Price discovery (e.g. different prices on BitFinex and Binance)
- Reliability of oracles and their parameters
- Existence of a primary market for redemptions and its capacity

Liquidity

Starting from the MIP6 liquidity analysis, we propose a further analysis which does not only focus on the amount of liquidity available but also on the type of liquidity. A collateral having most of the liquidity in a specific pool, would be exposed to different risk compared to another one with the same amount of on-chain liquidity. This is why we propose an assessment of:

- Amount of on-chain liquidity available
- Amount per LP pair
- Slippage per LP pair
- Order book depth
- Existence of a primary market for redemptions and its capacity

Appendix - Preliminary Analysis

Given a likely LTV of 50%, we can simulate how different LSTs would react in case of $100M in collateral. We assume this amount would be split into two different transactions of $50M, and simulate how much slippage would be generated for each LST. Based on these metrics, no LST would currently be eligible for onboarding.

Collateral

Market Cap

ETH Staked

Price

Order ($)

Order (n°)

Slippage

DeFi Presence

50m as collateral

stETH

21,709,633,996

9,430,000

$2,299.16

50,000,000

21,747.07

0.19%

TRUE

TRUE

rETH

1,413,097,795

1,110,000

$2,516.12

50,000,000

19,871.87

0.12%

TRUE

TRUE

wbETH

1,855,743,429

785,588

$2,362.23

50,000,000

21,166.44

93.69%

FALSE

FALSE

mETH

776,599,604

338,963

$2,329.84

50,000,000

21,460.70

/

FALSE

FALSE

frxETH

709,825,029

310,541

$2,284.29

50,000,000

21,888.64

9.28%

FALSE

FALSE

swETH

438,828,021

195,227

$2,362.14

50,000,000

21,167.25

99.25%

FALSE

FALSE

cbETH

412,885,276

170,361

$2,421.06

50,000,000

20,652.11

90.68%

TRUE

FALSE

ETHx

225,478,057

103,531

$2,332.36

50,000,000

21,437.51

80.49%

FALSE

FALSE

osETH

63,390,671

95,843

$2,304.22

50,000,000

21,699.32

55.26%

FALSE

FALSE

ankrETH

53,088,394

24,219

$2,617.34

50,000,000

19,103.36

90.44%

FALSE

FALSE

lsETH

/

30,543

$2,382.43

50,000,000

20,986.98

94.08%

FALSE

FALSE