

coinbase DERIVATIVES

June 28, 2024

VIA CFTC Portal

Mr. Christopher J. Kirkpatrick
Secretary of the Commission
Office of the Secretariat
Commodity Futures Trading Commission
Three Lafayette Centre
1155 21st Street, NW
Washington, DC 20581

Re: CFTC Regulation 40.2(a) Certification: Listing of Stellar Futures Contract

Dear Mr. Kirkpatrick:

Pursuant to Commodity Futures Trading Commission (“CFTC” or “Commission”) Regulation 40.2(a), Coinbase Derivatives, LLC (the “Exchange” or “COIN”) hereby submits for self-certification its initial listing of the Stellar Futures contract to be offered for trading on the Exchange on or after July 15, 2024.

Contract Description

The Stellar Futures contract (the “Contract”) will be a monthly cash-settled and margined Contract with the following specifications:

Product	Stellar Futures
Product Type	USD-settled index future
Contract Size	5,000 Stellar
Displayed Price Example	\$0.10001
Contract Notional	~\$500.00 Contract notional (i.e. ~\$0.10 x 5,000)
Contract Code	XLM
Minimum Tick Size and Value	Min tick size: \$0.00001 per Stellar Min tick value: \$0.05 per Contract
Listed Contracts	3 nearest monthly Contracts
Daily Settlement	Daily Settlement: 3:00 PM CT 1. 1-min VWAP of futures Contract rounded to the nearest tradable tick 2. 1-min TWAP of futures Contract midpoint of the bid/ask rounded to the nearest tradable tick 3. If a two-sided market is not available during the sixty (60) seconds prior to 3:00 PM CT, then the Settlement Price will be the Market Vector Coinbase Stellar index value - (difference between previous day’s index value and previous day’s futures settlement)

Final Settlement	<p>Final settlement price of the expiring Contract will be the value of the Market Vector Coinbase Stellar benchmark reference rate at 4:00 PM London time, calculated and disseminated by Market Vector. Contracts will be cleared by Nodal Clear.</p> <p>The index value is determined using a 2-hour settlement window, MVIS breaks the period into 40 3-minute intervals. In each of these intervals, MVIS aggregates all trades and volume from the constituent exchange and calculates a volume weighted median price for the interval. The settlement is based on a simple average of the 40 volume weighted median prices calculated.</p> <p>Should any abnormal activity occur during the settlement window, any combination of the following measures will be considered:</p> <ol style="list-style-type: none"> 1. Should the index provider detect an abnormal price during the settlement window, the price shall be removed from the calculation 2. Should the Coinbase Derivatives Command Center determine the settlement price is not representative of the market, it will manually settle the Contract using sources of historical data and prices on other exchanges and indexes.
Price Fluctuation Limits	10% of hourly calculated reference price
Last Trading Day	Trading terminates at 4:00 PM London time on the last Friday of the Contract month. If that day is not a business day in the U.S., trading terminates on the preceding day that is a U.S. business day.
Position Limits	3,000 XLM Futures
Large Trader Reporting	25 contracts
Trading Hours	5:00 - 4:00 PM CT Sunday - Friday, with a trading halt from 4:00 PM - 5:00 PM CT Monday - Thursday.

Contents:

- I. Stellar Market Overview
- II. Contract Description
- III. Volatility
- IV. Analysis of Deliverable Supply
- V. Compliance with Core Principles

I. Stellar Market Overview

Stellar is a decentralized, open-source blockchain platform launched in 2014 by Jed McCaleb, one of the co-founders of Ripple, and Joyce Kim. Stellar aims to facilitate fast, low-cost international money transfers and enable financial inclusion by connecting banks, payment systems, and individuals. The network's primary goal is to make it easier and more cost-effective to move money across borders, particularly in regions with underdeveloped financial infrastructures.

Stellar operates on a unique consensus mechanism known as the Stellar Consensus Protocol (SCP). Unlike traditional Proof-of-Work (PoW) or Proof-of-Stake (PoS) systems, SCP relies on a federated Byzantine agreement (FBA) model, which allows for faster transaction confirmations and reduced energy consumption. This protocol ensures the network's security and efficiency, enabling transactions to be settled in just a few seconds.

The native cryptocurrency of the Stellar network is the Lumen. Lumens serve several critical functions within the ecosystem: they act as a bridge currency for cross-border transactions, prevent spam attacks by requiring a small transaction fee, and help maintain the overall health and efficiency of the network. The total supply of Lumens is capped at 50 billion.

One of Stellar's standout features is its ability to facilitate the issuance, exchange, and transfer of digital assets, such as fiat currencies, cryptocurrencies, and commodities. This capability is crucial for enabling interoperability between different financial systems and supporting a wide range of financial services, from remittances to micropayments. Stellar's built-in decentralized exchange (DEX) allows users to trade these assets directly on the network, further enhancing its utility and accessibility.

II. Contract Description

The Stellar Futures Contract is a cash-settled Contract based on the Market Vector Coinbase Stellar Benchmark Rate ("Index"). This Index tracks the price of Stellar traded on the Coinbase, Inc. spot exchange. Market Vector is an Index Provider based in Frankfurt, Germany and is regulated by the Federal Financial Supervisory Authority ("BaFin").

Each Contract represents 5,000 Stellar. The Exchange will initially offer the three front months of the Contract for trading.

III. Volatility

Stellar is considered a moderately volatile asset. Several factors contribute to its volatility, including its lower market cap and its focus on cross-border payments and financial inclusion, which are still evolving sectors. Since the start of 2022, the 30-day trailing standard deviation of daily price changes for Stellar has averaged 3.8%. Volatility spikes occur periodically, similar to other digital assets such as Bitcoin and Ethereum.

While Stellar's price action is somewhat volatile due to the factors mentioned above, the Exchange has managed both periods of prolonged volatility and unexpected spikes in volatility in its existing products without market interruptions and with ample continuous liquidity. The Exchange is prepared to deploy its proven risk controls, applied to all of its listed products, including daily price limits, price banding, exposure limits, kill switches, and margin levels that appropriately reflect the volatility of Stellar.

Stellar's current 30D volatility is approximately 2.2%. Under comparable timeframes, other commodities have experienced realized volatility levels that are in line with Stellar's realized volatility. For reference, current Bitcoin and Ethereum 30D volatility are around 1.5%.

Since launch, the Exchange has had multiple instances of successful management of high volatility environments in its existing commodity contracts, as Bitcoin volatility was above 4% and Oil volatility was above 5% in 2022.

IV. Analysis of Deliverable Supply

Stellar was created with a limited supply of 50B Stellar. There are 29B Stellar tokens currently in circulation, which represent the deliverable supply.

Given that each COIN Stellar cash-settled Contract represents 5000 Stellar, a single Contract is <0.00002% of the deliverable supply.

To set position limits, the Exchange will be referencing the position limits to market cap ratio for existing crypto currency futures such as its Bitcoin contracts and adjusting downwards.

The Exchange will set the position limit to 3,000 XLM futures, which is equivalent to 15M Stellar. With a \$0.10 price of Stellar, this is equal to \$1.5M notional, which would be 0.05% of the Stellar market cap, currently at \$2.8B.

As a comparison, COIN Bitcoin Futures position limits are currently 0.10% of the Bitcoin market cap. The proposed XLM position limits would be 50% lower as a percentage of the underlying asset's market cap.

V. Compliance with Core Principles

The Exchange has reviewed the designated contract market ("DCM") core principles ("Core Principles") set forth in the Commodity Exchange Act and has identified that the Contract may most directly implicate the following Core Principles:

Core Principle 2 -- Compliance with Rules

Trading in the Contract is subject to the Exchange Rulebook (the “Rulebook”) including Chapter 5, which prohibits fraud, non-competitive trading, market manipulation and abusive and disruptive trade practices. Additionally, as with all contracts traded on the Exchange, trading will be subject to monitoring and surveillance by the Market Regulation Department, which has the authority to investigate and enforce Exchange Rules, as described in Chapter 7.

Core Principle 3 -- Contracts Not Readily Subject to Manipulation

The Stellar future is based on the Market Vector Coinbase Stellar Benchmark Rate, which will be published starting in July 2024. MV Index Solutions GmbH (“MVIS”) is governed by the European Benchmark Regulation (the “EUBMR”) and supports the International Organisation of Securities Commissions (IOSCO) “Principles for Financial Benchmarks” (the IOSCO Principles). COIN has a licensing agreement for the use of Market Vector for Coinbase Stellar futures. Market Vector manages the governance and oversight of the Index, as described in Appendix A below. COIN has signed an information sharing agreement with Coinbase, Inc. to allow the Exchange to request spot market data when necessary. Given that the Stellar token is traded on multiple exchanges both in the United States and abroad, and the manner in which the Index is calculated, it would be difficult, if not impossible, to manipulate the price of the underlying market in a way that would affect the futures Contract. In addition Coinbase, Inc. has in place an experienced surveillance team and policies and procedures to detect suspected manipulation in the spot market. Given this oversight, the Index is not readily subject to manipulation.

Core Principle 4 -- Prevention of Market Disruption

Chapter 5 of the Rulebook prohibits Participants from manipulating, distorting the price of, and disrupting the settlement process of the Contract. As with all contracts traded on the Exchange, trading in the Contract will be subject to monitoring and surveillance by the Market Regulation Department. Further, trading in the Contract shall be subject to price fluctuation limits. In addition, the Index Provider uses a Methodology which makes potential manipulation of the underlying spot market unlikely to have an effect on the Index price.

Core Principle 5 -- Position Limits or Accountability

The Contract shall be subject to a position limit of no more than 3,000 Stellar futures, or 15M Stellar, with a reportable level of 25 Contracts.

Core Principle 7 -- Availability of General Information

The Exchange shall publish on its website and in its Rulebook the specifications, terms and conditions of the Contract.

Core Principle 8 -- Daily Publication of Trading Information

The Exchange shall publish on its website on a daily basis the trading volumes, open interest, and price information for the Contract.

Core Principle 9 -- Execution of Transactions

The Contract shall be listed for trading on the Exchange’s trading system, which provides for efficient, competitive, and open execution of transactions.

Core Principle 10 -- Trade Information

All requisite trade information shall be included in the audit trail and is sufficient for the Market Regulation Department to monitor for market abuse.

Core Principle 11 -- Financial Integrity of Transactions

The Contract shall be cleared by Nodal Clear, LLC, a CFTC registered derivatives clearing organization subject to the CFTC regulations related thereto.

Core Principle 12 -- Protection of Markets and Market Participants

Chapters 4 and 5 of the Rulebook require all market participants, including futures commission merchants (“FCMs”) carrying customer accounts, to observe high standards of integrity, market conduct, commercial honor, fair dealing, and just and equitable principles of trade and prohibits, among other things, fraud, non-competitive trading, market manipulation, and abusive and disruptive trade practices. As with all contracts traded on the Exchange, trading will be subject to monitoring and surveillance by the Market Regulation Department.

Core Principle 13 -- Disciplinary Procedures

Rulebook Chapter 7 sets forth the rules and procedures for the investigation, enforcement, and sanctioning of persons that violate the Exchange’s Rules.

Core Principle 14 - Dispute Resolution

Disputes related to the Contract are governed by Chapter 8 of the Rulebook, which provides for arbitration procedures overseen by the National Futures Association.

Certification

The Exchange has spoken with FCMs and market participants who support the decision to launch a Stellar Contract. The Exchange is not aware of any substantive opposing views to the Contract. The Exchange certifies that the Contract and related rules certified herein comply with the Commodity Exchange Act and the rules and regulations promulgated thereunder.

The Exchange certifies that this submission has been concurrently posted on the Exchange’s website at: www.coinbase.com/derivatives.

If you have any questions or require any further information, please contact me at jane.downey@coinbase.com.

Sincerely,

/s/

Jane Downey
Chief Regulatory Officer

Attachments:

Appendix A Market Vector Coinbase Stellar Benchmark Rate Index Methodology

Appendix B Amendments to COIN Rulebook Chapter 11
Appendix C Amendments to COIN Rulebook Chapter 5

APPENDIX A

Market Vector Coinbase Stellar Benchmark Rate Index Methodology

The Market Vector Coinbase Stellar Benchmark Rate (“Index”) is produced by Market Vector Indexes of Frankfurt, Germany, an affiliate of Van Eck Associates Corporation (“MVIS”). The Index is calculated and disseminated in USD and tracks the price of Stellar as traded on the Coinbase, Inc. spot exchange.

Advisory Board

The MVIS Advisory Board is governed by the Rules of Procedure for the Advisory Board. The Advisory Board is responsible to supervise and advise the Managing Directors of MV. The approval of the Advisory Board is required for certain important decisions.

Independent Oversight Function

MVIS has implemented an Independent Oversight Function (“IOF”) that consists of employees of the Legal and Compliance department of VanEck (Europe) GmbH. Some of the key task and responsibilities of the IOF are:

- Periodic review of the Index Guide and Methodology;
- Review and approval of the procedures for index cessation;
- Oversee third parties involved in the provision of the indices, including calculation or dissemination agents;
- Assess internal and external audits or reviews, and monitor the implementation of identified remedial actions; and
- Monitor input data and contributors and MVI’s related actions in challenging or validating contributions of input data.

Managing Directors

MVIS has two Managing Directors (MD), the Operations and the Shared Services MD. The roles and responsibilities of the two different MDs are documented and serve to ensure mitigation of conflicts of interest and enhance governance standards. The Managing Directors are responsible for the ongoing review and monitoring of compliance with MVIS’ policies and procedures by all involved parties and the notification of possible breaches or incidents to the IOF.

The MVIS Stellar Benchmark Rate Index is not Subject to Manipulation

The Index is calculated as an average of 2-hour quantity weighted median prices, which are calculated for 40 3-minute intervals. The Contract price is determined by using a median price, which filters out any prices that might be considered outliers, either high or low.

$$\text{Index Value} = \frac{1}{n} \sum_{i=1}^n M(i).$$

where the quantity weighted median price for each interval i is

$$M(i) = \begin{cases} p_{i,k} & \text{if } k \text{ satisfies } \sum_{j=1}^{k-1} q_{i,j} < \frac{1}{2} \sum_{j=1}^{J_i} q_{i,j} \text{ and } \sum_{j=k+1}^{J_i} q_{i,j} \leq \frac{1}{2} \sum_{j=1}^{J_i} q_{i,j}, \\ p_{i,1} & \text{if } q_{i,1} \geq \frac{1}{2} \sum_{j=1}^{J_i} q_{i,j}, \\ \frac{p_{i,k} + p_{i,k+1}}{2} & \text{if } \sum_{j=k+1}^{J_i} q_{i,j} = \frac{1}{2} \sum_{j=1}^{J_i} q_{i,j}, \end{cases}$$

with the number of intervals calculated as the total index time window divided by the interval window:

$$n = \frac{T}{b},$$

and

- $p_{i,j}$ = j th price in i th interval,
- $q_{i,j}$ = j th quantity/volume traded in i th interval,
- J_i = number of trades in i th interval,
- b = interval window for the calculation of the median prices,
- n = number of intervals,
- T = total index time window for the calculation of an index price.

The set of trades for the total index calculation consists of transactions occurring within the total index time window as follows:

$$\theta_t = \{a_{i,j}(s_{i,j}, p_{i,j}, q_{i,j}) | t - T \leq s < t\},$$

with

- θ_t = set of trades for the calculation of the index price at time t ,
- $a_{i,j}$ = trade j in trade set A_i ,
- $s_{i,j}$ = time of trade $a_{i,j}$.

Each interval consists of a subset of trades of θ_t :

$$A_i \subset \theta_t$$

A_i being the set of trades for the calculation of the median price in interval i , where each trade $a_{i,j}$ within A_i is sorted by price $p_{i,j}$ in ascending order and it holds that trades occur within the interval window as follows:

$$A_i = \{a_{i,j}(s_{i,j}, p_{i,j}, q_{i,j}) | (t - T) + (i - 1)b \leq s < (t - T) + ib\}.$$

Due to the sheer number of times the price is recalculated, and the use of median prices, any attempt to manipulate the price of the Index would be extremely difficult. In addition to the calculation safeguards, MVI has procedures in place to prevent manipulation, MVIS has a number of policies and procedures in place to ensure a fair marketplace. MVIS has instituted measures to investigate and correct a potentially erroneous price due to bad data, late or delayed transactions and non-reporting exchanges. Incorrect or missing data is corrected immediately.

Disruptions with calculation agents are handled by Compliance and Senior Management at MVIS. MVIS will communicate any error to all affected clients. In addition, if MVIS identifies any conduct that may involve manipulation of an index by calculation/dissemination agent, it will report this to its regulator, BaFin.

The Exchange has in place an agreement with Coinbase, Inc. to share information and trade data occurring on Coinbase, Inc. in connection with regulatory inquiries. This agreement gives the Exchange the opportunity to investigate activity in the spot market which may have an impact on the listed futures Contract.

How Settlement is Calculated

During the 2-hour settlement window, MVIS breaks the hour into 40 3-minute intervals. In each of these intervals, MVIS aggregates all trades and volume from the Coinbase, Inc. spot exchange and calculates a volume weighted median price for the interval. The settlement is based on a simple average of the 40 volume weighted median prices calculated.

APPENDIX B

Additions underscored; deletion are ~~struckthrough~~

CHAPTER 11: CONTRACTS

* * *

RULE 1115. Stellar Futures

- (a) Scope. Rule 1115 is limited in application to the trading of the Stellar futures (“XLM Contract”). In addition to Rule 1115, the Stellar Contract is subject to all Rules of the Exchange as applicable. Unless otherwise stated, all times referred to herein are Central Time Zone. The relevant index for the XLM Contract is the MarketVector™ Coinbase Stellar Benchmark Rate (“Index”), as calculated and disseminated by MarketVector Indexes GmbH as the index provider and calculation agent (the “Index Provider”).
- (b) Trading Schedule. The Stellar Contract shall be offered for monthly trading in the front three (3) months during such hours as the Exchange shall determine from time-to-time.
- (c) Contract Size. The Contract size is equal to the price of 5,000 Stellar.
- (d) Price Increments. The minimum price increment shall be 0.00001 Index points (\$0.05 XLM Contract).
- (e) Position Limits, Position Accountability, and Reportable Levels. Pursuant to Rules 530 to 533 and subject to the requirements and exceptions therein, the Stellar Contract is subject to the following:
 - (1) Position Limit. 3,000 XLM Contracts.
 - (2) Reportable Level. 25 XLM Contracts.
- (f) Price Fluctuation Limits. Trading in the XLM Contract shall be subject to price fluctuation limits. If a price fluctuation limit is reached on the lead month of XLM Contract, all related instruments will be halted. If a price fluctuation limit is reached on the non-lead month XLM Contracts, only the specific instrument which reached the price fluctuation limit will be halted.
 - (1) Each hour, a Reference Price is calculated for each Contract using the Lead Month settlement procedures outlined in Rule 906(b)(ii)(1) (the “Reference Price”).
 - (2) A 10% up and down price limit will be applied to that Contract’s Reference Price.
 - (3) The market will enter a halt state for two (2) minutes if a price fluctuation limit is reached. Orders can be submitted, canceled, and amended during this state but no matching will occur.
 - (4) If a price fluctuation limit is reached, the new Reference Price will be the last price fluctuation limit for the remainder of that hour.

- (g) Termination of Trading and Expiration. Trading terminates at 4:00 PM London time on the last Friday of the Contract month. If that day is not a Business Day, trading terminates on the preceding day that is a Business Day (“Termination of Trading”). Expiration will occur the same Business Day as the Termination of Trading for the Contract.
- (h) Settlement. The XLM Contract is cash settled.
- (1) Daily Settlement Price of the Contract, which is an Exchange Futures Contract based on a crypto currency, will be determined pursuant to the process set forth in Exchange Rule 906(b)(ii).
 - (2) On the day of expiration, the Final Settlement of the Contract, which is an Exchange Futures Contract based on a crypto currency, will be determined pursuant to the process set forth in Exchange Rule 906(c)(ii).
 - (3) Final Settlement. Clearing Firms holding open positions in an expiring XLM Contract at the Termination of Trading shall make or receive payment in accordance with the rules of the Clearing House.
- (i) Forks. In the event of a hard fork, the XLM Contract will settle to the Index. The Exchange may, in its sole discretion, take alternative action with respect to hard forks in consultation with its Index Provider, its Clearing House and its market Participants.
- (j) Disclaimer.

The MarketVector™ Coinbase Stellar Benchmark Rate is a trademark of MarketVector Indexes GmbH and its affiliates (collectively “MarketVector”). MarketVector or MarketVector’s licensors own all proprietary rights in the MarketVector™ Coinbase Stellar Benchmark Rate. MarketVector is NOT affiliated with Coinbase Derivatives, LLC, and neither approves, endorses, reviews or recommends the XLM Contract. MarketVector does not guarantee the timeliness, accurateness or completeness of any data or information relating to the MarketVector™ Coinbase Stellar Benchmark Rate, and neither shall be liable in any way to Coinbase Derivatives, LLC, investors in the XLM Contract or other third parties in respect of the use or accuracy of the MarketVector™ Coinbase Stellar Benchmark Rate or any data included therein.

APPENDIX C

Additions underscored; deletion are ~~struckthrough~~

CHAPTER 5: TRADING PRACTICES AND BUSINESS CONDUCT

* * *

RULE 533. Position Limit, Position Accountability, Reportable Level, and Volume Threshold Level Table

The reportable levels for all Contracts covering Position Limit, Position Accountability, Reportable Level, and Volume Thresholds will be made available to Market Participants.

Product	CDE Code	Contract Size	Aggregate Into Futures	Aggregate Ratio	Exchange Reporting Level	Position Limit
Nano Bitcoin Futures	BIT	0.01	BTI	100 BIT = 1 BTI	25	20,000 (BTI Aggregate)
Bitcoin Futures	BTI	1	BTI	N/A	25	
Nano Ether Futures	ET	0.1	ETI	100 ET = 1 ETI	25	40,000 (ETI Aggregate)
Ether Futures	ETI	10	ETI	N/A	25	
Bitcoin Cash Futures	BCH	1	BCH	N/A	25	14,000
Litecoin Futures	LC	5	LC	N/A	25	10,000
Dogecoin Futures	DOG	5,000	DOG	N/A	25	20,000
<u>Stellar Futures</u>	<u>XLM</u>	<u>5,000</u>	<u>XLM</u>	<u>N/A</u>	<u>25</u>	<u>3,000</u>
Gold Futures	GOL	1	GOL	N/A	200	600,000
nano Crude Oil Futures	NOL	10	OIL	10 NOL = 1 OIL	350	40,000 three (3) days prior to the end of trading in the spot month
Micro Crude Oil Futures	OIL	100	OIL	N/A	350	40,000 three (3) days prior to the end of trading in the spot month