

May 1, 2020

#### BY ELECTRONIC FILING

Mr. Christopher J. Kirkpatrick
Office of the Secretariat
Commodity Futures Trading Commission
Three Lafayette Centre
1155 21st Street, N.W.
Washington, D.C. 20581

Re: CFTC Regulation 40.2(a) Certification. Notification Regarding the Initial Listing of Eris Exchange Physically Delivered Ether/Bitcoin Futures (Eris Exchange Submission #2020-03E)

Dear Mr. Kirkpatrick:

Eris Exchange, LLC ("Eris Exchange" or the "Exchange") hereby notifies the Commodity Futures Trading Commission (the "CFTC" or "Commission"), pursuant to Commission Regulation § 40.2, of its listing of Physically Delivered Ether/Bitcoin Futures (the "Contracts") on the Eris Exchange electronic trading platform, anticipated to begin on or after May 11, 2020.

This submission contains the following:

- 1. A summary of the terms of the Contracts (see Section 1);
- 2. A discussion of the Contracts' compliance with the relevant Designated Contract Market Core Principles ("Core Principles") as set forth in the Commodity Exchange Act (the "Act") and Commission Regulations (see Section 2);
- 3. A copy of the Contract Specifications, which shall appear in Exchange Rule 1101 (see Exhibit A); and
- 4. Certifications of compliance with the Act and rules thereunder, and posting on the Exchange's website (see Section 3).

The listing of these Contracts will not otherwise require amendments to the Eris Exchange Rulebook.



## 1. Summary of the Terms of the Contract

Eris Exchange plans to list the Contracts, with the specifications detailed below. The Contracts are physically-settled futures based on an ether ("ETH") bitcoin ("BTC") pair. The Contracts are fully funded at the time of execution, with final settlement at the execution price, and, as such, do not require any transfers of assets as part of a variation margin process. On a daily basis there will be a closing price, calculated as described below. Because the contracts are fully-funded at the time of execution, the daily closing or settlement price for these contracts is relevant only for purposes of providing market participants with account statements.

The ETH/BTC pair Contracts work similar to the physically-settled ether futures contract,<sup>1</sup> but rather than the buyer of the contract paying based on the value of ETH expressed in USD it is based on the value of ETH expressed in BTC. An example of a trade of the Contract is set forth in Exhibit C.

In developing these Contracts the Exchange has had conversations with current and anticipated market participants and intermediaries. These discussions have helped to inform the development of the contract specifications and related rules. The Exchange's Regulatory Oversight Committee and Exchange Practices Committee reviewed the Contracts prior to being submitted to the CFTC.

## 2. Core Principle Compliance

## Core Principle 2 – Compliance with Rules

- Impartial access to the Exchange, and thus trading of the Contracts by Participants, is
  governed by Chapter 3 and Rule 207 of the Exchange Rulebook (the "Rulebook"), which
  establishes the Exchange Participant Committee. Under Rule 207 the "Exchange
  Participant Committee shall not, and shall not permit the Exchange to, restrict access or
  impose burdens on access in a discriminatory manner, within each category or class of
  Participants or between similarly-situated categories or classes of Participants."
- Pursuant to Exchange Rule 314, any person initiating or executing a transaction in the Contract consents to the jurisdiction of the Exchange.
- Under Chapter 4 of the Rulebook, the Exchange has the ability and authority to obtain any information from market participants necessary to perform its obligations under Core Principle 2.
- Abusive trading practices in the Contract are prohibited by Chapter 5 of the Rulebook.
- Chapter 7 of the Rulebook sets forth the rules governing both the investigations and prosecutions of Rule violations. Pursuant to Rule 208, the Regulatory Oversight

<sup>&</sup>lt;sup>1</sup> The ETH cultures contract has been separately submitted to the CFTC for self-certification pursuant to CFTC Rule 40.2 and may be viewed on the ErisX website at: <a href="https://www.erisx.com/regulation/exchange-notices/">https://www.erisx.com/regulation/exchange-notices/</a>.



Committee (1) ensures that the Market Regulation Department has sufficient resources to perform its obligations, and (2) oversees the Exchange's regulatory program.

## **Core Principle 3 – Contracts Not Readily Subject to Manipulation**

The Contracts are fully funded and physically settled and, therefore, the financial incentive for manipulation is greatly outweighed by the cost. Specifically, an attempt to manipulate, corner, squeeze or congest final settlement, or attempt to do so would be unsuccessful. A market participant must post the underlying commodity to the Clearinghouse before they may sell the Contracts on the Exchange, so the necessary deliverable supply will be available at all times. Additionally, due to the lack of variation margin, any attempts to manipulate daily settlement prices will not provide a benefit to a market participant because the mark-to-market price movements will not result in any additional funds being available for trading or profit that can be withdrawn.

As noted above, because the contracts are fully-funded at the time of execution, the daily closing or settlement price for these contracts is relevant only for purposes of providing market participants with statements. Pursuant to Exchange Rule 906, the Exchange will publish a daily settlement price. The settlement price for the contract will be determined as follows:

- 1. Based on the volume weighted average price of executed trades for the contract during the last ten (10) minutes of trading on each trading day:
  - a. The closing period will be broken down into two (2) distinct five (5) minute periods for which the volume weighted average price will be calculated;
  - b. The average of the two (2) value weighted average prices will be the settlement price;
- 2. If no trades occur during the last ten (10) minutes of trading, the last trade in the Exchange's spot market during the same period for ETH will be used and adjusted by the difference between the previous day spot closing price and the previous day futures closing price; or
- 3. If no trade has occurred in the Exchange spot market during this period or in the event that the Exchange concludes that the settlement price determined in accordance with the foregoing does not fairly represent the market value of the period, the Exchange may determine an alternative settlement price. Such determination may be based upon, among other things, a third party or combination of third party index or reference prices during the settlement period so as to mitigate the influence of trades executed as outliers.

## **Core Principle 4 – Prevention of Market Distortion**

Chapter 5 of the Rulebook prohibits Participants from manipulating, distorting the price of, and disrupting the physical settlement process of the Contracts. Such Rulebook provisions are enforced by the Market Regulation Department. The Contracts are physically settled and, therefore, are not settled based upon an underlying ETH reference price. Accordingly, there are



no identifiable spot market venues the manipulation of which would directly impact the settlement price of the Contracts.

## **Core Principle 5 – Position Limits or Accountability**

Pursuant to Rules 530, 531 and 532 the Exchange has the authority to establish position limits, accountability levels and reportable levels for Contracts listed on the Exchange. The reportable level is set at 25 contracts, consistent with CFTC Rule 15.03. The Exchange sets the position limit at a fraction of the deliverable supply of the underlying commodity, and can be readily adjusted by the Exchange based on market conditions. Based on the cash market and deliverable supply analysis set forth in Exhibit B, the Exchange has determined to set the position limit at 75,000 contracts.

## **Core Principle 7 – Availability of General Information**

The Exchange will publish on its website, <u>www.erisx.com</u>, and in its Rulebook accurate information concerning the terms and conditions of the Contracts. The current Exchange rulebook may be found at <u>www.erisx.com</u>.

## **Core Principle 8 – Daily Publication of Trading Information**

The Exchange will publish on its website daily trading volume, open interest, and price information pertaining to the Contracts.

## **Core Principle 9 – Execution of Transactions**

The Contracts will be listed for trading on the Exchange, which provides for efficient, competitive, and open execution of transactions. All trades must be executed through the Exchange centralized market. As is customary in futures markets, we anticipate permitting block trades for trades above certain minimum quantities pursuant to and in conformance with Rulebook Chapter 6 (Privately Negotiated Transactions).<sup>2</sup>

## **Core Principle 10 – Trade Information**

Pursuant to Exchange Procedures, all information pertaining to trading of the Contracts will be retained in a manner that enables the Exchange to use the information to assist in the prevention of customer and market abuses and to provide evidence of any violations of the rules of the Exchange. This includes maintaining a full audit trail for reconstructing all transactions, permitting the detection, investigation and prevention of customer and market abuse and providing evidence of violations of Exchange rules.

## **Core Principle 11 – Financial Integrity of Transactions**

The Contracts will be cleared by Eris Clearing (the "Clearinghouse"), which is registered as a derivatives clearing organization. Exchange Rules are in place to ensure the financial integrity

<sup>&</sup>lt;sup>2</sup> Block trades on the Contracts will only be permitted after all necessary regulatory filings and approvals.



of futures commission merchants as well as the protection of customer funds, to the extent that such entities and funds are associated with trading the Contracts.

## **Core Principle 12 – Protection of Markets and Market Participants**

Chapter 5 of the Rulebook establishes rules to protect Participants who trade the Contracts from abusive practices by parties, including those operating as agents of the Participants, and promotes fair and equitable trading in the Contracts. The trade surveillance program, operated by the Exchange Market Regulation Department routinely monitors and surveils trading activity. It is anticipated that the program will remain the same or substantially similar for the new asset class.

## **Core Principle 13 – Disciplinary Procedures**

Chapter 7 of the Rulebook sets forth the rules related to the investigation and prosecution of potential rule violations in the trading of the Contracts. Additionally, Chapter 7 sets forth potential sanctions for rule violations.

#### 3. Conclusion

The Exchange certifies that the listing of the Contracts complies with the Act and the rules thereunder. The Exchange certifies that this submission has been concurrently posted on the Exchange's website at <a href="https://www.erisx.com/regulation/exchange-notices/">https://www.erisx.com/regulation/exchange-notices/</a> under "CFTC Submissions."

In the event that you have any questions, please contact me at (646)961-4486 or <a href="michael.piracci@erisx.com">michael.piracci@erisx.com</a>

Sincerely,

/s/

Michael A. Piracci Senior Counsel



# Exhibit A

# **Ether Bitcoin Futures**

Description	A fully funded physically settled futures contract for the Ether Bitcoin Pair
Contract Symbol	ETBT
Contract Size	1 ETH
Price Quotation	BTC equivalent of 1 ETH
Minimum Price Increment	0.00001 Bitcoin
Listed Contracts	Up to 5 Daily expirations, 3 Weekly expirations, nearest 2 serial months and nearest 2 quarterly months.
Settlement	Physical Delivery
Trading Hours	Sunday 17:00 - Friday 16:00 (CT)
Daily Closing Time	16:00 (CT)
Last Trading Day/Time	Daily - 10:00 (CT) of the expiry day Weekly - 10:00 (CT) Friday* of the expiry Week Monthly - 10:00 (CT) Last Friday* of the contract month * Preceding business day if day falls on a non-business day
Position Limit	75,000
Large Trade Reporting	25 Contracts
Collateral Withheld	Buyer: No. of Contracts * Contract Size * Trade Price Seller: No. of Contracts * Contract Size
Delivery	Pursuant to the Eris Clearing rulebook, purchase price of the future and the underlying deliverable commodity are deposited with the Clearinghouse (in accordance with Eris Clearing Rules 403 and 315) by the buyer and seller prior to the futures trade. Therefore, delivery is made through the Clearinghouse to the buyer's account. Further information about delivery can be found in Eris Clearing Rule 410.
Forks	Any forks in the underlying blockchain for the digital asset will be evaluated in accordance with Exchange Rule 911.



#### **Exhibit B**

# **Deliverable Supply Analysis**

#### **ETH Overview**

Ethereums original token distribution event created 60 million Ether ("ETH") (80% of the initial 72 million ETH supply). The other 12 million ETH were distributed among the early contributors of the Ethereum Foundation.

Unlike Bitcoin ("BTC"), ETH is not capped at a maximum supply, but it does have a monetary policy that follows the objective of minimum issuance to secure the network. That is, ETH monetary policy tries to reduce issuance to minimum amounts without sacrificing security.

In order to release ETH not currently in circulation, the coins need to be mined. Mining is a process by which an individual or group of individuals gather a series of blockchain transactions, validate that all of them are valid and legitimate and publish them in a block by solving a hashing algorithm. When a block is published, the miner of that block unlocks new ETH into circulation and is given ownership of those new ETH. As of April 2020, the issuance of ETH is 2 ETH per block mined and an additional 1.75 ETH per uncle block.

As ETH is a decentralized network, the monetary policy cannot be modified unless there is a majority consensus from all the stakeholders (developers, community members, ecosystem projects, miners and network participants). Since inception, there have been three (3) changes to ETH issuance policy. From block 0 to block 4,3699,999 five (5) ETH were issued per mined block; from block 4,370,000 to block 7,280,000 three (3) ETH were issued per mined block; and from block 7,280,000 to the present block two (2) ETH are issued per mined block.



## **Circulating Supply**

ETH circulation supply has increased since inception from the original 72 million ETH to the current circulating supply of over 110 million ETH.

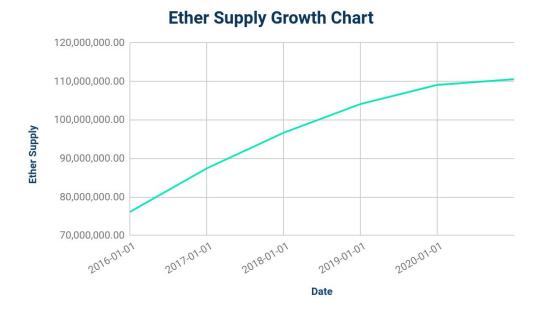


Image 1: ETH Supply Growth (Source: Etherscan, <a href="https://etherscan.io/chart/ethersupplygrowth">https://etherscan.io/chart/ethersupplygrowth</a>).

The increase in ETH supply has decreased over the years as part of the ETH inflation control mechanisms inherent to this blockchain. The supply increased over 10% in the first two years, decreasing to an increase of 4.77% in 2019.

Table 1: ETH supply growth (Source: Etherscan, https://etherscan.io/chart/ethersupplygrowth).

	Total ETH in Circulation at EOY	Total Percent Increase	Average ETH in Circulation	Average Percent Increase
2015	76,140,217	-	74,084,479	-
2016	87,462,107	14.87%	81,645,291	10.21%
2017	96,692,242	10.55%	92,602,293	13.42%
2018	104,124,057	7.69%	100,442,413	8.47%
2019	109,094,019	4.77%	106,723,862	6.25%
2020 (through to 4/19/2020)	110,589,018	1.37%	109,845,870	2.93%



Table 2: Total ETH supply (Source: Etherscan, <a href="https://etherscan.io/chart/ethersupplygrowth">https://etherscan.io/chart/ethersupplygrowth</a>).

	2017	2018	2019	Average 2017-2019
January	88,440,875	97,333,229	104,657,518	96,810,541
February	89,322,198	97,905,411	105,048,576	97,425,396
March	90,289,403	98,538,107	105,470,340	98,099,284
April	91,199,299	99,151,171	105,879,866	98,743,446
May	92,100,985	99,789,952	106,302,389	99,397,776
June	92,923,943	100,407,167	106,710,481	100,013,864
July	93,699,513	101,042,605	107,132,786	100,624,968
August	94,357,118	101,676,780	107,554,559	101,196,153
September	94,894,657	102,289,132	107,960,850	101,714,880
October	95,445,491	102,920,927	108,374,180	102,246,866
November	96,055,954	103,525,271	108,752,925	102,778,050
December	96,692,242	104,124,057	109,094,019	103,303,440

#### Transactions:

The number of transactions per year have grown through the first 3 years, but at a declining rate. In 2019 there was a slight reduction in transactions year over year. Up until April 19,2020 the number of on chain transactions has been 73,699,598 which projects a total of 246,792,232 for the year and is comparable with 2019.

Table 3: Total ETH on-chain transactions (Source: Etherscan, <a href="https://etherscan.io/chart/tx">https://etherscan.io/chart/tx</a>).

	Total ETH Transactions per year	Total Percent Increase
2015	1,055,177.00	
2016	13,661,077.00	1194.67%
2017	102,941,034.00	653.54%
2018	251,166,529.00	143.99%
2019	242,832,115.00	-3.32%

Table 4 provides the monthly ETH volume transacted on-chain for the three most recent years. The average monthly ETH transacted on chain over the period is 184,538,564 ETH, which would be equivalent to 184,538,564 futures contracts (contract size: 1ETH).

Table 4: Total ETH on-chain transaction volume (Source: Inca Digital, https://inca.digital/)

	2017	2018	2019
January	85,628,787	388,940,806	82,406,345
February	86,730,494	146,111,873	60,859,390
March	456,897,916	62,314,445	76,174,379



April	299,605,820	58,228,062	90,511,896
May	558,370,232	71,339,897	106,998,924
June	430,931,307	64,097,582	84,153,731
July	525,711,991	49,559,093	68,781,210
August	524,016,122	52,723,192	63,657,963
September	381,921,741	67,102,510	65,016,920
October	348,584,937	57,806,428	54,753,712
November	469,992,674	99,414,915	55,244,541
December	381,903,228	113,624,619	53,270,613

## On-exchange volume:

Table 5 below presents the total ETH transacted on spot exchanges on a monthly basis for the most recent four years. The average monthly ETH exchange volume has been 379,655,611 ETH. We adjust this value by the percentage of the exchange volume represented by trading of ETH against the USD in spot products, which is estimated at 5% of the total trading volume, resulting in a total of 18,982,781 ETH. The average trade volume is equivalent to 18,982,781 futures contracts (contract size: 1ETH).

Table 5: Total ETH traded on exchange (Source: Yahoo Finance, https://finance.yahoo.com/quote/ETH-USD/history?p=ETH-USD)

	2016	2017	2018	2019
January	53,869,485	51,686,047	148,849,507	672,343,856
February	74,960,830	36,209,641	96,427,129	786,360,637
March	82,129,842	119,075,780	90,111,896	1,010,874,161
April	58,011,195	60,385,025	112,811,839	1,234,640,280
May	74,353,377	102,688,903	120,177,448	1,421,345,164
June	84,914,178	107,415,935	107,344,680	981,632,456
July	69,780,253	142,847,590	112,988,718	1,008,726,797
August	47,539,759	111,988,338	155,045,794	1,026,536,191
September	27,489,309	83,828,532	246,990,048	1,202,855,310
October	26,334,287	43,370,383	212,097,243	1,402,034,325
November	26,649,046	86,490,952	387,898,076	1,470,492,499
December	49,652,956	122,948,031	657,795,976	1,812,469,655

#### Conclusion:

The Exchange recommends an initial position limit of 75,000 contracts. The limit of 75,000 contracts is the equivalent of 75,000 ether; or 0.067% of the underlying deliverable of 110,500,000 ETH as defined above; 0.4% of the underlying spot monthly traded volume as defined above; or 0.04% of the monthly volume transacted on-chain as defined above.



#### **Exhibit C**

This document provides an example of an Ether/Bitcoin Futures Trade.

If the Central Limit Order Books (CLOB) of the BTC Future and the ETH Future are:

BTC Future			
BID		OF	FER
Quantity	Price	Price	Quantity
10	6,750	6,755	10

ETH Future			
BID		OFF	ER
Quantity	Price	Price	Quantity
100	141.5	142.0	100

We can compute implied bid and offer in the Ether/Bitcoin Future by using the BTC Future and ETH Future prices.

- Ether/Bitcoin Bid = ETH Best Bid / BTC Best Bid
- Ether/Bitcoin Offer = ETH Best Offer / BTC Best Offer

Ether/Bitcoin Future			
В	ID	OFI	FER
Quantity	Price	Price	Quantity
100	0.02096	0.02103	100

Note that due to the minimum price increment of 0.00001 in EtherBitcoin Futures, there may be rounding involved in some calculations.

## **Trade Flow:**

A Member sends an order to buy 10 Ether/Bitcoin Futures @0.02102, therefore aggressing the current best offer in the market and generating a trade.

Side	Collateral Withheld
Buyer + 10 @ 0.02102	10 * 1 * 0.02102 = 0.2102 BTC
Seller – 10 @ 0.02102	10 * 1 ETH= 10 ETH

## **Futures Contract Expiration:**

When the futures contract expires the Clearing House will settle the positions using the collateral withheld at time of the trade, the Buyer will receive 10 ETH and the seller will receive 0.2102 BTC.