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RE: Shardus Token ("ULT") Legal Opinion

LEGAL OPINION

I. OPINION SUMMARY:

This Legal Opinion addresses the following U.S. regulatory questions pertaining to the Shardus Project's ("Shardus") creation and usage of the Shardus Token ("ULT") on the Shardus distributed ledger software (the "Platform").

■ LEGAL QUESTION:

Whether Shardus's creation and usage of the ULT constitutes a Security or Investment Contract as defined under Section 2(a)(1) of the United States Securities Act of 1933 (the "Securities Act").

Whether Shardus's creation and usage of the ULT triggers compliance requirements under the Bank Secrecy Act of 1970 (the "Bank Act").

■ CONCLUSION:

Subject to the limitations set forth below, the undersigned is hereby of the opinion that the creation and usage of the ULT does not constitute "securities" or "investment contracts" pursuant to the *Howey* test because ULTs are only distributed in exchange for products and services provided to Shardus. ULTs are not sold in exchange for cryptocurrencies, tokens or any fiat currency. Therefore, no investment exists. Additionally, no party has an expectation of profits by receiving ULTs, nor does any party rely on the efforts of Shardus to receive profits from ULTs. Therefore, registration with, and/or submitting notice to the United States Securities and Exchange Commission (the "Commission" or the "SEC"), identifying ULTs as securities or restricted securities contravenes the purpose of federal statutory language within the Securities Act.

Subject to the limitations set forth below, the undersigned is hereby of the opinion that Shardus does not qualify as either an "exchanger" or "administrator" of convertible virtual currency under the Bank Act because the Platform does not engage in the exchange of virtual currency for real currency, funds, or other virtual currency, nor does the Platform have the ability to redeem (withdraw from circulation) any ULT once the ULT is issued. Therefore, Shardus does not qualify as a "money transmitter" as defined under 31 CFR § 1010.100(f)(5)(ii)(A)–(F) of the Bank Act.

II. INTRODUCTION:

This opinion presents and analyzes the current regulatory framework for U.S. Securities and Banking laws as applied to cryptographic digital tokens.[1] The purpose of this opinion is to determine whether Shardus has compliance requirements under the Securities Act and Bank Act.

III. DISLCOSURE

This legal opinion is based solely on the sources of information listed in the attached annex and/or explicitly described herein as well as publicly available information and documents including, without limitation, the *Shardus Whitepaper*, the *Shardus Token GitHub*, and the *Shardus Website*. To the extent any additional and/or presently unidentified sources of information or newly enacted regulation materially alter the opinions contained herein, the undersigned assumes no liability. Additionally, this opinion is explicitly limited to the law of the following jurisdictions: U.S. Subject to the foregoing, we hereby present this legal opinion.

IV. OVERVIEW OF SHARDUS

The Shardus Project is an association of software developers contributing to the development and release of novel distributed ledger software. As the Shardus Whitepaper states, the "Shardus project aims to build novel distributed ledger technology." Shardus's first application of this novel software is a "peer-to-peer

[1] The Shardus Platform uses the Ethereum Blockchain to generate ERC-20 tokens. *See* https://github.com/Shardus/shardus.github.io/wiki/Shardus-Token

decentralized network" that allows the community to take over future development of the Shardus software. In other words, Shardus created an incentive-based token to be distributed to developers for "products and services" provided to the Platform. ULTs are not sold in exchange for any funds.

Platform participants who receive ULTs for their development contributions to the Platform are not doing so for promotional purposes. Instead, Platform participants receive ULTs in exchange for services used and/or rendered on the Shardus Platform. In other words, ULTs grant licensing rights to developers to the Shardus software. Overall, the Platform is a distributed ledger software where participants use and develop products and services. ULTs serve to incentivize development on the Platform to progress the technology towards more adoption and participation.

V. LEGAL OPINION: SEC

A. Preliminary Statement

To determine the full extent of Shardus's regulatory compliance requirements, a detailed understanding of the statutory regulatory framework, as applied to the cryptocurrency industry, is necessary. Currently, the U.S. lacks any statutory or common law precedent explicitly addressing cryptocurrencies. As a result, our analysis focuses on U.S. federal courts and regulatory administrative agencies applying traditional authoritative statutes through proceedings and judicial determinations regarding digital securities.[2] Our analysis focuses on precedent set by the federal judiciary and administrative guidance provided by the SEC and FinCEN.

B. Applying the Securities Act of 1933 & the Howey Test to the Shardus Token ("ULT")

Based on the facts and circumstances set forth below, ULTs are not securities or investment contracts pursuant to Section 2(a)(1) of the Securities Act because: (1) recipients of any ULTs did not provide any real currency, funds, or other virtual currency in exchange for the ULT; (2) no ULT recipient is afforded an expectation of profits because ULTs simply represent compensation for services rendered; and (3) no ULT recipient relies on

[2] *See e.g.*, SEC, Report of Investigation Pursuant to Section 21(A) of the Securities Exchange Act pf 1934: The "DAO Report", securities act release no. 81207 (July 25, 2017) (applying the traditional securities Howey Test to conclude the DAO token was a security).

Shardus to receive profits tied to the ULT because Shardus is an association comprised of any participant on the Platform.

Section 2(a)(1) of the Securities Act of 1933 defines "securities" as: "any note, stock, treasury stock, security future, security-based swap, bond, debenture, evidence of indebtedness, certificate of interest or participation in any profit-sharing agreement … investment contract … or, in general, any interest or instrument commonly known as a 'security', or any certificate of interest or participation in, temporary or interim certificate for, receipt for, guarantee of, or warrant or right to subscribe to or purchase, any of the foregoing."[3] A broad definition, Section 2(a)(1) carries significant precedent regarding statutory interpretation.

The seminal Supreme Court case for interpreting Section 2(a)(1) is *SEC v. Howey*,[4] which created the test, *i.e.*, the *Howey* test, used to determine whether an instrument meets the definition of a "security" under the Securities Act.[5] In *Howey*, the Court held that units of a citrus grove, coupled with a contract for serving the grove, was an investment contract.[6] The defendants offered buyers the option of leasing any purchased land back to the defendants, who would then tend to the land, and harvest, pool, and market the citrus.[7] The SEC sued defendants over these transactions, claiming they broke the law by not filing a securities registration statement.[8] The Supreme Court, in issuing its decision finding the defendants' leaseback agreement is a form of security, developed a landmark test for determining whether certain transactions are investment contracts.

The Court in *Howey* specifically defined the term "investment contract" within the definition of a "security," noting it has been used to classify instruments that are of a "more variable character" that may be considered a form of "contract, transaction, or scheme whereby an investor lays out money in a way intended to

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[3] *See* 15 U.S.C. § 77b.
[4] 328 U.S. 293 (1946).
[5] Indeed, the Court has referred to the test established by *Howey* for determining whether an instrument is a security as, "in shorthand form, [embodying] the essential attributes that run through all of the Court's decision defining a security." *See United Housing Found., Inc. v. Forman*, 421 U.S. 837, 852 (1975). However, the Court subsequently emphasized that this statement was meant to apply only in the context of determining whether an instrument is an investment contract. *See Landreth Timber Co. v. Landreth*, 471 U.S. 681, 691 n.5 (1985).
[6] 328 U.S. at 239.
[7] *Id.*
[8] *Id.* at 298.

secure income or profit from its employment."[9] The Supreme Court has recognized lower courts subsequently have required only an expectation of profits from the efforts of others, rather than solely from the efforts of others when determining whether a financial instrument is a security. [10]

The *Howey* test is divided into four prongs:

> An investment contract for purposes of the Securities Act means a contract, transaction or scheme whereby a person [1] invests his [or her] money in [2] a common enterprise and is led to [3] expect profits [4] solely from the efforts of the promoter or a third party, [excluded factors] it being immaterial whether the shares in the enterprise are evidenced by formal certificates or by nominal interests in the physical assets employed in the enterprise.[11]

In order to be considered a security, all four factors must be met. In other words, if an instrument does not satisfy the requirements of the *Howey* test, it is not an investment contract, and thus not a security.

For example, in *International Brotherhood of Teamsters v. Daniel*,[12] the Court held interests in a noncontributory, compulsory pension plan were not investment contracts because there was "no investment" of money and no expectation of profit from a common enterprise.[13] The Court also has held an investment contract is not present "when a purchaser is motivated by a desire to use or consume the item purchased."[14] In *United Housing Found., Inc. v. Forman*, the Court held, among other things, that shares in a nonprofit cooperative housing corporation were not investment contracts because "investors were attracted solely by the prospect of acquiring a place to live, and not by financial returns on their investments."[15]

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[9] *Id.* at 239, 298-99. In *Howey*, the Court stated that "[s]uch a definition necessarily underlies" the Court's earlier decision in *SEC v. C.M. Joiner Leasing Corp.*, 320 U.S. 344 (1943). In *Joiner*, the Court held that the offer of oil and gas leaseholders, which would be drilled by the offeror for the buyer, was the offer of a security. In rejecting the claim that these rights were strictly leasehold interests, the Court foreshadowed the later opinion in *Howey*. The Court also has relied on the *Howey* definition of the term "investment contract" in subsequent decisions, such as when it held that a variable annuity contract is a security (*see SEC v. Variable Annuity Life Ins. Co. of America*, 359 U.S. 65, 72 n. 13 (1959)) and when it held that withdrawable capital shares in a state-chartered savings and loan association were securities rather than certificates of deposit (*see Tcherepnin v. Knight*, 389 U.S. 332, 338 (1967). *See also SEC v. United Benefit Life Ins. Co.*, 387 U.S. 202 (1967) (holding that the accumulation portion of a flexible fund variable annuity contract was an investment contract for purposes of the Securities Act).

[10] *Forman*, 421 U.S. at 852 n.16.

[11] 328 U.S. 299; *see also SEC v. Edwards*, 540 U.S. 389, 393 (2004) (reaffirming the *Howey* analysis); *see also Forman*, 421 U.S. at 852-53 (The "touchstone" of an investment contract "is the presence of an investment in a common venture premised on a reasonable expectation of profits to be derived from the entrepreneurial or managerial efforts of others.").

[12] 439 U.S. 551 (1979).

[13] *Id.* at 559-62.

[14] *See Forman*, 421 U.S. at 852-53.

[15] *Id.* at 853.

Similarly, the Court has suggested that an agreement reflecting a private commercial transaction is not an investment contract. For example, in *Marine Bank v. Weaver*,[16] the Court held that a privately negotiated loan agreement was not an investment contract when that agreement provided lenders with a set monthly payment, a share of the profits of a company owned by the borrowers, the right to use a barn and a pasture, and the right to veto future borrowings.[17] The Court held the private nature of the agreement and the unique, individually tailored provisions of the agreement demonstrated that the agreement was not a security.[18] Subsequently, however, in *Landreth Timber Co. v. Landreth*, the Court rejected the suggestion that the Securities Act "were intended to cover only 'passive investors' and not privately negotiated transactions involving transfer of control to 'entrepreneurs.'"[19]

Considering this precedent, U.S. Courts have interpreted the *Howey* test broadly, *e.g.*, an investment of money may include not only the provision of capital, assets and cash, but also goods, services or a promissory note.[20] Indeed, according to the Supreme Court, the *Howey* test "embodies a flexible rather than a static principle, one capable of adaptation to meet the countless and variable schemes devised by those who seek the use of the money of others on the promise of profits."[21]

This consumer protection precedent provides a fact specific application to ensure any interpretation does not go beyond not only the intended purpose of the *Howey* test, but also the statutory language within the Securities Act. Overall, the test eschews classification based on formalities, such as offering stock certificates, or terminology, such as selling "shares" or "stock," in favor of a flexible test based on economic circumstances. As the *Tcherepnin v. Knight* opinion affirms, "in searching for the meaning and scope of the word 'security' . . . form should be disregarded for substance and the emphasis should be on economic reality."[22]

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[16] 455 U.S. 551 (1982).
[17] *Id.* at 553.
[18] *Id.* at 559-60.
[19] 471 U.S. at 692.
[20] *Howey*, *supra* note 6, at 299.
[21] *Id.*
[22] *Tcherepnin*, 389 U.S. at 336.

Generating tokens via a blockchain platform can generate a security and be characterized as taking "nominal interests in the physical assets employed in the enterprise."[23] Indeed, cryptocurrency technology has, assuredly, been utilized in certain circumstances as persuasive window-dressing in the marketing of Ponzi schemes, or to use the *Howey* Court's terms, "schemes devised by those who seek the use of the money of others on the promise of profits."[24] This is a reality of the industry, and certain regulatory actions regarding cryptocurrency projects are certainly justified.

However, each case requires a fact specific application of precedent, and in circumstances where no actual token offering exists, Courts and administrative agencies would be hard pressed to determine a that a generated token with no sale constitutes a security. The general administrative precedent regarding categorizing cryptocurrencies as securities exists,[25] *e.g., The DAO Report*, *Munchee*, *Paragon*, and *Airfox,* and rightly so, the majority of these administrative opinions start with a determination of whether an investment exists. However, before diving into the administrative application, an understanding regarding traditional cryptocurrency categorization in the securities context is not only needed, but at the forefront of the analysis.

C. A Primer on Cryptocurrency Regulation: *The DAO Report*, *Munchee*, and Beyond

In July 2013, the SEC brought its first enforcement action, *SEC v. Shavers*, directed at the cryptocurrency industry by filing a federal action against an operator of an alleged Ponzi scheme based on "bitcoin dominated investments."[26] There, the SEC argued the "investments" fell under the catch-all category of securities known as "investment contracts," and thus constituted securities.[27] Conversely, the defendant argued that, because investors paid in Bitcoin, rather than money, the first prong (*i.e.,* investment of money) was not satisfied.[28] The Court disagreed, holding that Bitcoin, as a cryptocurrency, could be considered a "form" of money, and as a result, the investments were securities.[29] That following month, then-SEC Chair Mary Jo White

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[23] *Howey*, *supra* note 6, at 299.
[24] *Id.*
[25] The DAO Report, *supra* note 4.
[26] *SEC v. Shavers*, No. 4:13-CV-416 (E.D. Tex. Aug. 6, 2013), adhered to on reconsideration, No. 4:13-CV-416 (E.D. Tex. Aug. 26, 2014).
[27] *Id.*
[28] *Id.* at 416-17.
[29] *Id.*

elaborated that the SEC has jurisdiction over "interests issued by entities owning virtual currencies or providing returns based on assets such as virtual currencies" regardless of whether the underlying cryptocurrency, *e.g.*, Bitcoin, is itself a security.[30] This set the stage for regulatory enforcement precedent regarding the SEC.

However, actions taken by the SEC over the next few years would contradict both the *Shavers* ruling as well as Chairman White's statements.[31] Indeed, the cryptocurrency and blockchain industry as a whole lacked significant regulatory guidance regarding the application of securities laws towards tokens up until the SEC issued *The DAO Report* in July 2017.[32] This report not only launched the SEC to the forefront of the industry as a leading regulatory agency, it also represented the first time the SEC categorized a token as a security.[33]

i. *The DAO Report*

The DAO Report targeted the Decentralized Autonomous Organization (the "DAO"), an organization offering its own tokens for purchase using the Ethereum Blockchain token, Ether. The tokens represented interests in the DAO platform, and its organizers would invest in projects that received a majority vote from DAO token holders. Created by Slock.it, the platform was marketed as a "for-profit entity whose objective was to fund projects in exchange for a return on investment."[34] The DAO, despite a massive fundraise over $150 million was not registered in any sovereign jurisdiction. Nor did the DAO have a board of directors, a CEO, or management team. The rationale behind the crowdfunding was the creation of new software applications, but before the venture took flight, it was hit with a cyber-attack draining 1/3rd of its funds.

The SEC investigated the DAO in connection with the offering's potential applicability to federal securities laws and whether the tokens constituted securities.[35] Applying the *Howey* test, the SEC focused on the fact that Slock.it used "various promotional materials disseminated by Slock.it and its cofounders informed

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[30] Office of Legislative Affairs, U.S Department of Homeland Security, "Responses to Chairman Carper and Senator Coburn's August 12, 2013 Letter Regarding Virtual Currencies." November 12, 2013. https://online.wsj.com/public/resources/documents/VCurrenty111813.pdf
[31] *See e.g.*, Matter of Erik T. Voorhees, Adm. Rpoc. File No. 3-15902 (June 3, 2014) (determining Mr. Voorhees solicitation for shares in two of his companies in exchange for Bitcoin without registering the offerings violated Section 5(a) and 5(c) of the Securities Act); *see also* In the Matter of BTC Trading Corp. Adm. Rpoc. File No. 3-16307 (December 8, 2014) (finding the owner of two online cryptocurrency exchanges violated the Securities Act by failing to register either as an exchange or a broker-dealer).
[32] *The DAO Report*, *supra* note 4.
[33] *Id.* at 1.
[34] *Id.*
[35] *Id.*

investors that [t]he DAO was a for-profit entity whose objective was to fund 12 projects in exchange for a return on investment."[36] Additionally, the DAO Token satisfied the expectation of profits prong because "the DAO's investors relied on the managerial and entrepreneurial efforts of Slock.it and its co-founders, and the DAO's Curators, to manage the DAO and put forth project proposals that could generate profits for the DAO's investors."[37] Lastly, while DAO Token holders had certain voting rights, this did not grant them "control over the enterprise," and thus the fourth prong of the *Howey* test was also satisfied.[38]

Overall, *The DAO Report* stated that U.S. federal securities laws "may apply" to "virtual tokens" and confirmed the analysis would depend on an application of the *Howey* test to the specific "facts and circumstances" of each token sale.[39] Applying this guidance, *The DAO Report* concluded that the DAO token in question constituted a security for at least three reasons: (1) purchasers jointly contributed funds to invest in projects; (2) token holders obtained the right to vote on where to invest; and (3) holders received pro rata dividend payments from each project's profits.[40]

However, while seminal in nature, *The DAO Report* cannot be read to suggest all virtual currencies are subject to federal securities laws, and the SEC has stated on several occasions that certain tokens, *e.g.*, Ether and Bitcoin, are not securities.[41] If anything, *The DAO Report* solidified the notion the SEC has authority to regulate cryptocurrencies as well as that each token evaluation is on a case-by-case basis. In other words, no set token standard exists for whether one type of token is or is not a security, but applying this precedent to token frameworks provides insight into compliance requirements, if any.

Since *The DAO Report*, the SEC has brought a number of enforcement actions targeting token-based projects. Several were brought by the SEC Cyber Unit, an entity formed to "focus the Enforcement Division's substantial cyber-related expertise on targeting cyber-related misconduct," including "[v]iolations involving

[36] *Id.* at 12.
[37] *Id.*
[38] *Id.*
[39] *Id.* at 10.
[40] *Id.* at 17-18.
[41] William Hinman's Statements as the Director of the Division of Corporation Finance SEC. "Digital Asset Transactions: When Howey Met Gary (Plastic)." June 14, 2018. https://www.sec.gov/news/speech/speech-hinman-061418

distributed ledger technology and initial coin offerings." As the SEC noted in a court filing, certain offerings are effectively "old-fashioned fraud dressed in a new-fashioned label."[42]

Overall, these cases show the SEC's intention to combat fraud and bad actors as applied to cryptocurrencies and token offerings. In fact, the agency issued several alerts to warn potential investors about the risks involved in participating in token offerings (also referred to as Initial Coin Offerings ("ICOs")).[43] Therefore, a specific analysis of the facts of the token is necessary as well as how and when information was presented to those who receive tokens.

ii. *Munchee and Beyond*

Only a handful of cases exist where the SEC categorized a token as a security. Even more scant are cases where there was an absence of fraud and no purchasing of the actual token occurred.[44] The first of which came shortly after *The DAO Report*, against Munchee, Inc., and provided needed clarity because sales of "useful items" are generally not regulated as securities offerings.[45]

On December 11, 2017, the SEC targeted an ICO launched by Munchee Inc., which raised $15 million to develop an App that used blockchain technology to allow users to write restaurant reviews.[46] The Munchee team stated it would both pay food reviewers and allow restaurant owners to purchase advertising in the Munchee Token ("MUN").[47] According to the white paper, once the app was built, MUN Tokens would be used to make purchases in the app or at participating restaurants.[48] At the time of the offering, because the platform did not exist yet, the MUN Tokens served no commercial purpose.

[42] *See e.g.*, *U.S. v. Zaslavskiy*, No. 1:17-cr-00647, slip op., 2018 WL 4346339 (E.D.N.Y. Sept. 11, 2018) (Judge Raymond Dearie of the Eastern District of New York upheld a criminal indictment for securities fraud involving the sales of cryptocurrency tokens in an ICO); *Commodity Futures Trading Commission v. McDonnell*, 287 F. Supp. 3d 213 (E.D.N.Y. 2018) (determining that fraudulent ICOs can be subject to enforcement proceedings under the antifraud provisions of the Commodities Exchange Act).
[43] SEC. "Spotlight on Initial Coin Offerings and Digital Assets." https://www.sec.gov/spotlight-initial-coin-offerings-and-digital-assets
[44] In the Matter of Munchee Inc., SEC Release No. 33-10445 (Dec. 11, 2017) (cease and desist order); AirFox, Paragon, Crypto Asset Management, TokenLot, and EtherDelta's founder. Division of Corporation Finance, Division of Investment Management, and Division of Trading and Markets. "Statement on Digital Asset Securities Issuance and Trading." Nov. 16, 2018. SEC.
[45] *Munchee Inc.*, SEC Release No. 33-10445.
[46] *Id.* at 1-2.
[47] *Id.* at 3.
[48] *Id.* at 4; *see also* The Munchee Token Whitepaper by Dr. Sanjeev Verma, Nghi Bui and Chelsea Lam. October 16, 2017. https://www.theventurealley.com/wp-content/uploads/sites/5/2017/12/Munchee-White-Paper.pdf

The SEC issued an order concluding that the ICO "constituted unregistered securities offers and sales."[49] In support of this conclusion, the SEC applied the Howey analysis and noted, among other things, that the marketing materials for the ICO (i) described how the new app would "create demand for MUN Tokens;" (ii) "likened MUN to prior ICOs and digital assets that had created profits for investors;" (iii) were "specifically marketed to people interested in those assets – and those profits – rather than to people who, for example, might have wanted MUN tokens to buy advertising or increase their 'tier' as a reviewer on the Munchee App;" and (iv) noted the potential creation of a secondary market for MUN Tokens.[50] The SEC explained that "[b]ecause of these and other company activities, investors would have had a reasonable belief that their investment in tokens could generate a return on their investment."[51]

Furthermore, the SEC highlighted that tokens were sold to the general public and investors reasonably expected a profit from the rise in value of the token derived from the efforts of Munchee, Inc., and its agents. As a result, the SEC targeted the fact the Munchee team promised a rise in value to investors due to the token being listed on an exchange.[52] Indeed, the SEC stated, "Munchee described the way in which MUN tokens would increase in value as a result of Munchee's efforts and stated that MUN tokens would be traded on secondary [crypto] markets."[53]

Specifically, the Munchee team published a blog post on October 30, 2017 that was titled "7 Reasons You Need To Join The Munchee Token Generation Event."[54] Reason 4 listed on the post was "As more users get on the platform, the more valuable your MUN tokens will become" and then went on to describe how MUN purchasers could "watch[] their value increase over time" and could count on the "burning" of MUN tokens to raise the value of remaining MUN tokens.[55] The SEC focused on two key factors in the order: (i) the strong emphasis by Munchee and its agents on the potential profits of an investment in the MUN tokens, both in the

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[49] *Munchee*, *supra* note 46, at 10.
[50] *Id.* at 3, 7, 9-10.
[51] *Id.* at 9.
[52] *Id.* at 5, 9.
[53] *Id.*
[54] *Id.*
[55] *Id.*

white paper and other social media outlets and in the token design itself, and (ii) the inability to use the MUN tokens for any purpose for a substantial period of time.

Overall, the SEC's approach towards *Munchee* clarified that a token presented as a "utility token" does not exempt it from the definition of a security, although it did not resolve the substantive issue of whether and how a utility token may fall outside the securities definition. Indeed, it was not clear from the Order whether the SEC would have reached the same conclusion – that the MUN Tokens qualified as investment contracts – if the Munchee App were fully operational and the tokens could immediately be used to buy and sell goods or services. With that said, the Order cautioned that "[e]ven if MUN tokens had a practical use at the time of the offering, it would not preclude the token from being a security" and stated that "[d]etermining whether a transaction involves a security does not turn on labelling – such as characterizing an ICO as involving a 'utility token' – but instead requires an assessment of 'the economic realities underlying a transaction.'"[56] In other words, even if the platform was fully operational, there could still be a chance the tokens were investment contracts. Therefore, while a fully functional platform is not the only factor to consider, if it does exist, this does not necessarily contribute to the token being a security.

Several months after the *Munchee* ruling, William Hinman, Director of the SEC's Division of Finance, provided guidance to the industry regarding the SEC's position on "utility tokens."[57] He observed that "virtually any asset[s]" can be securities "provided the investor is reasonably expecting profits from the promoter's efforts."[58] In doing so, he referenced a 1985 Second Circuit case suggesting that certain representations by the seller of a product could convert the product into a security offering.[59] Seen in this light, even a true utility token with an immediate use case could fall within the ambit of the federal securities laws

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[56] *Id.* at 9-10
[57] Hinman's Statements, *supra* note 43.
[58] *Id.*
[59] *See Gary Plastic v. Merrill Lynch*, 756 F.2d 230 (2d Cir. 1985) (applying Howey and concluding that, although bank certificates of deposit (CDs) are generally not securities, they were in this case because "a significant portion of the customer's investment depends on Merrill Lynch's managerial and financial expertise" – including its promises regarding the existence of a secondary market and its continuing marketing efforts, which would impact the value of the CDs and the potential for profit).

depending on the presence of investment intent and how it was marketed. Indeed, Director Hinman underscored that the *Howey* analysis “is not static and does not strictly inhere to the instrument.”[60]

Consistent with the concept of *Howey* as a moving target, Director Hinman stated that “a digital asset offered as a security can, over time, become something other than a security.”[61] For example, a digital token used to purchase goods and services within a “sufficiently decentralized” network – *i.e.*, one “where purchasers would no longer reasonably expect a person or group to carry out essential managerial or entrepreneurial efforts” – could evolve beyond its initial classification as a security.[62] As such, Director Hinman intimated that a fully functioning utility token may fall outside of the SEC’s jurisdiction.

Director Hinman provided a number of factors in assessing whether a digital token is offered as an investment contract and thus a security, including the role of the promoter and whether the asset is designed for investment or consumptive purposes. Importantly, he concluded that current offers and sales of Ether and Bitcoin are not securities transactions.[63] Hinman’s speech suggests a clarification of the SEC’s stance towards ICOs and a path forward for certain tokens. Moreover, the SEC expressed a willingness to provide market participants with case-specific guidance on these issues, thereby further reducing the regulatory risk of token transactions. For example, Director Hinman has stated that “[w]e stand prepared to provide more formal interpretive or no-action guidance about the proper characterization of a digital asset in a proposed use.”[64]

More recently, the SEC issued additional guidance in the *Tomahawk*, *Airfox*, and *Paragon* opinions. In *Tomahawk*, the SEC determined the issuance of tokens in exchange for services rather than any form of money may constitute an offering of securities.[65] In addition to an ICO, Tomahawk Exploration LLC “Bounty Program,” whereby 200,000 TOM tokens were allocated to pay third parties, offering between 10 and 4,000 TOM tokens in exchange for the following activities: marketing efforts; making requests to list TOM tokens on

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[60] Hinman’s Statements, *supra* note 43.
[61] *Id.*
[62] *Id.*
[63] SEC Chairman, Jay Clayton reaffirmed these statements on March 12th, 2019.
[64] Hinman’s Statements, *supra* note 43.
[65] *In the Matter of Tomahawk Exploration LLC and David Thompson Laurence*, Securities Act Rel. No. 33-10530, Exchange Act Rel. No. 34-83839, Admin. Proc. File No. 3-18641 (Aug. 14, 2018)

token trading platforms; promoting TOM tokens on blogs and online forums such as Twitter or Facebook; creating professional picture file designs; YouTube videos, other promotional materials; and online promotional efforts that targeted potential investors and directed them to Tomahawk's offering materials.[66] Tomahawk issued more than 80,000 TOM tokens as bounties to approximately forty wallet holders on Tomahawk's decentralized platform in exchange for the activities listed above.

The SEC reasoned that the TOM tokens were considered securities because "[t]he TOM tokens were offered in exchange for the investment of money or other contributions of value" and that "[t]he representations in the online offering materials created an expectation of profits derived from the efforts of others, namely from the oil exploration and production operations conducted by Tomahawk and from the opportunity to trade TOM tokens on a secondary trading platform."[67] Importantly, the SEC Staff's stated the Bounty Program constituted an offer and sale of securities because Tomahawk provided tokens to investors in exchange for investors' services designed to advance the company's economic interests and foster a trading market for its securities.[68] The SEC explained how distributing tokens in exchange for services could still be deemed an offer of securities under Section 2(a)(3) of the Securities Act because it involved "an attempt or offer to dispose of, or solicitation of an offer to buy, a security or interest in a security, for value." The SEC determined that notwithstanding "[t]he lack of monetary consideration for purportedly 'free' shares," the issuance as a "gift" through the Bounty Program constituted a "sale" or "offer to sell" within the meaning of the Securities Act.[69] Therefore, when tokens are provided through a bounty program in exchange for services, this alone can still result in the token being a security.

Furthermore, in two SEC administrative rulings, *Airfox* and *Paragon*, tokens were offered with the promise that the tokens provided utility to investors within the applications developed by the companies.[70]

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[66] *Id*.
[67] *Id*.
[68] *Id*. at Para. 33 & 34.
[69] *See SEC v. Sierra Brokerage Servs., Inc.*, 712 F.3d 321 (6th Cir. 2013).
[70] Press Release, Two ICO Issuers Settle SEC Registration Charges, Agree to Register Tokens as Securities, SEC (Nov. 16, 2018), https://www.sec.gov/news/press-release/2018-264.

However, the companies intended to add new functionality to their platforms after the offerings and primed investors' expectations to profit from such functionality in online promotional material. Each of the companies also assured investors that they would promote a secondary market for their tokens and control the supply of their tokens. Given these entrepreneurial efforts and their actual and marketed link to the value of the tokens, the SEC found investors reasonably expected to profit from the efforts of Airfox and Paragon.

The main take-away from these SEC administrative rulings and judicial precedent is: (1) tokens that satisfy the *Howey* test are securities; (2) each token is evaluated on a case-by-case basis; (3) utility and the lack of an investment does not absolve tokens from a securities designation; and (4) tokens that instill an expectation of profits due to the efforts of the token issue will almost always result in a securities designation.

D. Howey Test Applied: ULTs are not Securities or Investment Contracts

ULTs do not constitute a "security" or "investment contract" under Section 2(a)(1) of the Securities Act because no individual and/or entity is able to acquire ULTs: (1) in exchange for cryptocurrencies, tokens or any fiat currency; (2) with an expectation of profits; or (3) by relying on Shardus's expertise to receive any form of profits. Indeed, ULTs cannot be purchased. Instead, ULTs are generated to "incentivize development of the Shardus software" by distributing tokens to volunteers who use and develop on the Platform. While this does not unequivocally absolve ULTs from a securities designation, the lack of any promotional information regarding the token on secondary markets as well as no direct effort of Shardus to contribute and/or dictate the value of ULTs means this token does not fall under the securities definition.

The following subsections apply three of the four prongs of the *Howey* test to reaffirm this conclusion.

i. *First Prong: Investment of Money*

The first factor of the Howey test – investment of money – requires a consideration of how the token is distributed. The broad definition imposed by the SEC regarding what an investment of money is typically results in an automatic satisfaction of this prong of the test. Indeed, in *The DAO Report*, the SEC determined that because users had exchanged the Ether token for DAO tokens, there was an investment of money. As a result, this prong will be satisfied where a participate provides some financial instrument in exchange for the tokens. Additionally, the *Tomahawk* opinion dictated that in addition to an ICO, an investment does not need to exist because tokens given for "free" could be securities where the tokens are used to advance the company's economic interests and foster a trading market.

Here, the creation and distribution of ULTs fails to satisfy this prong because ULTs are not sold in exchange for cryptocurrencies, tokens or any fiat currency. In addition to Shardus not offering the tokens through an ICO, the services developers can provide in exchange for tokens do not advance the Shardus's economic interests or foster a trading market. Indeed, the tokens cannot be redeemed with the project for any value. Shardus also does not have the ability to take ULTs out of circulation once they have been distributed. Therefore, the *Tomahawk* opinion is differentiated from the Shardus project in that the Shardus project does not conduct a sale of the tokens, nor is there a bounty program the awards users for promoting the value of the token or its use on a secondary market.

The purpose of securities law is to promote honest disclosure from issuers who would otherwise be motivated to overstate the value of their company's shares.[71] The purpose of this core value is to assign culpability to those issuing securities with the intention of controlling the profitability of the security issued.[72] Here, the Shardus Project is composed of volunteer software developers who can be rewarded for contributing work through a token used on the Platform. Outside of the initial rules adopted by the Shardus community, there is no centralized company that dictates the functionality of the Platform, usage of the token, and/or promotion of a secondary market. Therefore, this prong is not satisfied.

ii. *Third Prong: Expectation of Profits*

The ULT does not instill an expectation of profits within any participant of Shardus's Platform because: (1) there is no sale of the ULT; (2) the value of the ULT is set to a nominal value of $0.10 USD; (3) Shardus does not dictate, contribute, and/or promote the value and/or market related to the ULT; and (4) no developers

[71] The words of the preamble: 'An Act To provide full and fair disclosure of the character of securities sold in interstate and foreign commerce and through the mails, and to prevent frauds in the sale thereof, and for other purposes.' 48 Stat. 77, as amended, 48 Stat. 906, 15 U.S.C. 77d, 15 U.S.C.A. § 77d.
[72] *Id.*

who receive ULTs rely on actions conducted by Shardus regarding any increase and/or decrease in value of ULTs.

Under the "expectation of profits" prong, profit refers to the type of return or income an investor seeks on their investment.[73] Profits may include all manner of returns, such as dividends, other periodic payments or the increased value of the investment regardless of whether it's a varied or fixed return.[74] When applied to cryptographic tokens, profit may refer to any type of return or income earned as a result of possessing the token, with the caveat that profits must be derived from the efforts of others (discussed below).

In the Eleventh Circuit's analysis of whether certain transactions met this prong of the *Howey* test, the Court interpreted *Forman* to determine that profits "require either a participation in earnings by the investor or capital appreciation."[75] Therefore, no expectation of profits exists where no capital appreciation or participation in earnings exists for investors.

Generally, if tokens are provided in exchange for services, *e.g.,* development and/or usage of a distributed ledger technology, without any sale and or promotional aspect, then there is a poor case for expectation of profits.[76] A line of cases stemming from *Howey* supports this analysis.[77] In cases dealing with investments made in housing cooperatives, courts have found no expectation of profits when the investor wishes to live in or rent out the property. Similarly, the Platform is not intended to create a profit-making mechanism for developers, but instead an opportunity for developers to contribute and use a secure software platform. There is no potential for a developer to think they will receive any added financial benefit once they have received ULTs because it is simply a reward for their contribution. There is no central entity. There is no promotional material and/or information that would indicate there will be a secondary trading market or that the ULTs will increase in value. As a result, because the ULT does not offer the potential for a developer or token

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[73] *Howey*, *supra* note 6, at 293; *see e.g., Edwards*, 540 U.S. at 390; Sec. *& Exch. Comm'n v. ETS Payphones, Inc.*, 300 F.3d 1281, 1282-84 (11th Cir. 2002).
[74] *Edwards*, 540 U.S. at 390.
[75] *ETS Payphones,* 300 F.3d at 1284.
[76] *See e.g.*, Ethereum, which uses a native token as a necessary "fuel" or "gas" for powering smart contracts. "Gas and transaction costs," Ethereum Frontier Guide.
[77] *See Goldberg v. 401 North Wabash Venture LLC*, 755 F.3d 456 (2014) (finding an investment into condominium units was not a security); *Forman*, 421 U.S. at 837 (holding that a commercial transaction is not a security where the purpose of the transaction is not investment for profit).

recipient to receive "profits" under the definition laid out in *Howey* and *Forman*, it is extremely unlikely any user of the Platform has an expectation of profits.

With that said, because courts evaluate this prong in combination with the fourth prong, *i.e.*, efforts of others, a better analysis combines both factors. Indeed, even if there is a profit or return, this does not mean an investment contract is a security.[78] It is the passive nature of the return, as determined by the "efforts of others," that would elevate the financial instrument to an "investment contract" security as opposed to a simple contractual instrument.

iii. *Fourth Prong: Efforts of a Third Party*

This final prong focuses on correlation, *i.e.*, whether profits of the investor mirror those of the issuers.[79] Indeed, put another way, the question becomes whether a nexus exists between the actions of a particular third party and the profits received by an investor, or more precisely, whether the investors/purchasers rely on those efforts. Combining this and the third prong, the expectation of profits resulting from the purchase of a token would relate to whether the token purchaser obtains any rights or investment interests.

Two well-known judicial cases exploring this issue are *Gary Plastic* and *Marine Bank*.[80] In both cases investors were purchasing bank-issued interest-earning certificates of deposit (CDs), which are not securities. However, what distinguished these two cases was that in *Marine Bank*, the reseller acknowledged it was dealing only in conventional CDs, and in *Gary Plastic*, the promoter characterized the investment as wholly different from ordinary bank-issued CDs because purchasers could rely on the seller for certain additional benefits.[81] In *Marine Bank*, the reseller was not issuing securities, but in *Gary Plastic* the reseller was deemed to be an unregistered issuer because of investor reliance upon these sufficiently substantial additional efforts.[82] Therefore, the crux of the analysis falls not necessarily on whether efforts exist, but whether the investor relied

[78] *Edwards*, *supra* note 13, at 390-91.
[79] *See e.g., SEC v. Glenn W. Turner Enters.*, 474 F.2d 476, 482-83 (9th Cir. 1973); *SEC v. Koscot Interplanetary, Inc.*, 497 F.2d 473 (5th Cir. 1974) (holding that where promoters retain immediate control over the essential managerial conduct of an enterprise, rather than remote control similar to a franchise arrangement, this element is met); *but see Hirsch v. Dupont*, 396 F. Supp. 1214, 1218-20 (S.D.N.Y. 1975), aff'd, 553 F.2d 750 (2d Cir. 1977) (indicating that solely should have literal application).
[80] *Gary Plastic Packaging Corporation v. Merrill Lynch*, 756 F.2d 230 (2d Cir. 1985); *Marine Bank v. Weaver*, 455 U.S. 551 (1982).
[81] 756 F.2d 230 (2d Cir. 1985); 455 U.S. 551 (1982) at 552.
[82] *Id.*

on the efforts.

Applied here, if Shardus were to sell or resell ULTs, repurchase the tokens under certain conditions, facilitate the creation of secondary markets, or make other guarantees about liquidation, then a substantial reliance on the efforts of the promoter such that the contract, implicit or explicit, between the investor and the promoter would constitute a security. None of these aspects exist within the Shardus Project. Shardus does not have the ability to increase the ULTs value. The only acquisition that occurs is where developers receive tokens for their services. Any incentive to provide services to the Platform simply create a traditional contract for those who wish to develop using the Platform.[83]

E. CONCLUSION

Shardus's creation of the Platform as well as ULTs do not constitute a securities investment contract as defined under the Securities Act. The SEC stated that when determining whether an instrument is a security, "form should be disregarded for substance,"[84] and "the emphasis should be on economic realities underlying a transaction, and not on the name appended thereto."[85]

The economic realities here focus on the fact that there is no token sale, no promotion of the token value, and certainly no indication of a secondary market. ULTs merely incentivize software development and usage. Therefore, no developer will receive ULTs with the expectation they will receive a profit based on the efforts of Shardus, unlike traditional cryptocurrencies.

For the aforementioned reasons, as stated above, the undersigned is hereby of the opinion that the creation of ULTs does not constitute "securities" or "investment contracts" pursuant to the *Howey* test because no party has an expectation of profits by receiving ULTs in exchange for software development, nor does any party rely on the efforts of Shardus or other third party to receive capital contributions based on their receipt of

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[83] In a similar vein, the value of license or franchise rights outside the token context can increase over time due to the secondary market, and both instruments are categorized as non-securities. Such increases in value derive both of the efforts of the holder and from the licensing or franchising system itself.
[84] *Tcherepnin*, 389 U.S. at 336.
[85] *United Housing Found.*, 421 U.S. at 849.

ULTs. Therefore, registration with, and/or submitting notice to the SEC, identifying the ULTs as securities or restricted securities contravenes the purpose of federal statutory language.

VI. LEGAL OPINION: FinCEN

Shardus does not fall under the Bank Secrecy Act ("Bank Act") because it does not issue and redeem ULTs, nor does Shardus facilitate the transaction of ULTs between two independent users. The Bank Act requires certain businesses that fall under the "financial institution" definition" to collect and retain information about their customers and share the information with the Financial Crimes Enforcement Network ("FinCEN"). The creation of cryptocurrencies raises important questions regarding which entities constitute a "financial institution" under the Bank Act. In 2013, FinCEN published guidance on the "Application of FinCEN's Regulations to Persons Administering, Exchanging, or Using Virtual Currencies" ("the Guidance").[86] The Guidance interprets rules previously promulgated by the Treasury ("the implementing regulations") that implement the Bank Act.[87]

The Bank Act contains broad definitions of sub-categories of financial institutions, and grants power to the Treasury to craft new or more specific definitions through notice and comment rulemaking.[88] Typically, an inquiry into whether a person or business fits into one of several sub-categories of "financial institution" is focused on what activities that person performs (e.g. money transmission, foreign exchange, banking, etc.).

Relevant in this case, the "money transmitter" sub-category of "financial institution," however, has a broader definition. It extends to money transmission involving "currency … or other value that substitutes for currency."[89] Therefore, the Guidance clarifies which activities performed using cryptocurrency may fit within the existing definition of "money transmission" in the implementing regulations. Money transmitters fall into a broader category of "money services business" ("MSB"), which in turn is one of several categories of "financial

[86] Department of the Treasury Financial Crimes Enforcement Network, FIN-2013-G001 Application of FinCEN's Regulations to Persons Administering, Exchanging, or Using Virtual Currencies (March 18, 2013) available at https://www.fincen.gov/sites/default/files/shared/FIN-2013-G001.pdf.
[87] 31 CFR §§ 1010-1060.
[88] 31 USC § 5312(a)(2)-(Y).
[89] Implementing Regulations *supra* note 87 at § 1010.100(ff)(5).

institution."[90] This has relevancy in the Shardus example because the Shardus Project could have obligations as an MSB, but not as a money transmitter. With that clarification in mind, the Guidance turns to the question of which persons dealing with cryptocurrency fit within the money transmitter sub-category of the Bank Act.

The Guidance creates and defines three categories of persons: administrators, exchangers, and users.[91] Only administrators and exchangers qualify as money transmitters.[92] With respect to exchangers, the Guidance reads:

> An exchanger is a person engaged as a business in the exchange of virtual currency for real currency, funds, or other virtual currency.
>
> [and]
>
> An ... exchanger that (1) accepts and transmits a convertible virtual currency or (2) buys or sells convertible virtual currency for any reason is a money transmitter under FinCEN's regulations.[93]

Interpreting this section, the statutory language affords the following conclusions: (1) a person or a business is an "exchanger" if they run a business; (2) the definition of "exchanger" requires that one be "engaged as a business in the exchange of virtual currency"; and (3) a person or a business are only a "money transmitter" if they are an "exchanger" that "accepts and transmits" or "buys and sells" bitcoins or another virtual currency. "Accepts and transmits" means you take bitcoin or another cryptocurrency from one customer and send it to another person or persons. Note that you have to do both, accept and transmit. If all you do is give bitcoin to someone else (again in return for a good or service) then the person or entity is also not a money transmitter.[94]

Here, Shardus does not sell ULTs. Shardus does not accept and transmit ULTs on behalf of developers. Interpreting the Guidance, it follows that a new protocol developer who does not sell tokens to others but, instead, gives them away or distributes them through mining (e.g. Bitcoin's release schedule), or in exchange for services is likely not an exchanger or a money transmitter because the issuer is only engaging in the

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[90] *Id.* at § 1010.100(ff).
[91] Guidance *supra* note 86 at 2.
[92] *Id.* at 3-5.
[93] *Id.* at 3.
[94] *See* FinCEN, BSA Requirements for MSBs. https://www.fincen.gov/bsa-requirements-msbs.

"production and distribution of software."[95] Relevant to the Software and Investment Ruling by FinCEN, Shardus is only engaged in the "production and distribution of software" and they do not "accept and transmit" tokens for others.

Furthermore, Shardus is not an administrator under the Bank Act. Indeed, while the administrator definition also may apply to certain MSBs, the Guidance makes clear that an entity or person must issue and redeem a token to fall under the Bank Act's compliance requirements. Indeed, the Guidance defines administrator as follows:

> An administrator is a person engaged as a business in issuing (putting into circulation) a virtual currency, and who has the authority to redeem (to withdraw from circulation) such virtual currency.[96]

As stated above, the crux of this definition is that the person or business must be able to both issue and redeem the cryptocurrency. Here, while Shardus is certainly issuing a token by distributing ULTs to developers, the Shardus Project has no ability to redeem ULTs, and in fact any ULT recipient has no ability to redeem ULTs to Shardus. Therefore, Shardus does not fall under the administrator or exchanger definition, and thus does not need to register with FinCEN.

Thank you for your confidence.

Sincerely,

Andrew Bull

ANDREW T. BULL, ESQUIRE

BULL BLOCKCHAIN
LAW LLC

[95] FinCEN, FIN-2014-R002 Application of FinCEN's Regulations to Virtual Currency Software Development and Certain Investment Activity (January 30, 2014) https://www.fincen.gov/sites/default/files/shared/FIN-2014-R002.pdf, [hereinafter Software and Investment Ruling].
[96] Guidance *supra* note 6 at 2.

INDEX OF DOCUMENTS RELIED UPON

1. Company's Website: https://shardus.com/
2. Company's Whitepaper: https://shardus.com/whitepaper.pdf
3. Shardus Token ("ULT") GitHub: https://github.com/Shardus/shardus.github.io/wiki/Shardus-Token