Orrick, District Judge:

The Commodity Futures Trading Commission is a federal regulatory agency that administers and enforces the Commodity Exchange Act and related regulations. The CFTC filed the underlying complaint in this action against Ooki DAO, a decentralized autonomous organization that the CFTC alleges violated the CEA by enabling users to engage in retail commodity transactions without abiding by CEA requirements, including registering its "platform" and conducting certain customer due diligence. The CFTC contends that Ooki DAO was structured intentionally to render its activities "enforcement proof," including by erecting significant obstacles to traditional service of process.

This appears to be a case of first impression, and it begins with questions of sufficiency of service. Several amici represented by national law firms claim that the CFTC cannot serve Ooki DAO, and if it can, has not done so properly. I disagree. Ooki DAO has received both actual notice and the best notice practicable under the circumstances. As explained below, I reject the arguments of the amici. Ooki DAO is deemed to be served as of the date of this Order.

Background ...

I. Factual Background

According to the complaint, bZeroX, LLC, operated a blockchain-based software called the "bZx Protocol" from June 1, 2019 until August 23, 2021. The bZx Protocol operated on the Ethereum blockchain through the use of "smart contracts"[1] that permitted anyone with "an Ethereum wallet" to, essentially, make investments and bet on the relative rise and fall of particular virtual currencies. As the CFTC explains it, these investments and bets allowed users to "contribute margin (collateral) to open leveraged positions whose ultimate value was determined by the price difference between two digital assets from the time the position was established to the time it was closed." This technology is functionally the same as using a trading platform and, according to the CFTC, constitutes an "exchange" for commodity derivative transactions.

bZeroX LLC had a website to market its technology to prospective users, solicit orders, and facilitate access to the software Protocol. bZeroX LLC also charged and collected fees for access to its technology. Additionally, bZeroX LLC had a "liquidity pool" that contained assets supplied by "liquidity providers." In exchange for supplying liquidity, these providers received both "interest-generating tokens" and "BZRX Tokens," the latter of which conferred voting rights on the holders for certain questions related to governance of the Protocol. *Id.* Finally, bZeroX LLC had "Administrator Keys" which allowed bZeroX to "access and control" the operation of the smart contracts (pieces of software code) and the funds held in those smart contracts, including by updating code, pausing or suspending trading, and directing deposits of funds to users.

According to a *CFTC* regulatory settlement against the founders of bZeroX, the LLC never registered with the CFTC nor conducted the customer due diligence required to protect against fraud, money-laundering, and terrorist activity, as required by the *CEA* for most exchanges that enable commodity derivative transactions.

In August 2021, bZeroX LLC "transferred control" of the software Protocol[3] to "the bZx DAO," which was subsequently renamed "Ooki DAO." A DAO is a "decentralized autonomous organization" which is a way to organize people, a social-coordination technology that relies on blockchain-based smart contracts and incentives to facilitate collaboration and collective action. Put differently, DAOs allow "unrelated parties" to use software code on a blockchain without needing a "centralized coordinating authority," and permit users to take actions to edit open-source software. The CFTC alleges that "the bZx Founders believed that transition to a DAO would insulate the bZx Protocol from regulatory oversight and accountability for compliance with U.S. law" due to its structure and built-in anonymity of users.

The DAO continued operating the underlying Protocol software in the same way as the LLC had, permitting users to engage in the same retail commodity transactions and continuing the collection of user fees. Those fees and revenue were collected in a central DAO Treasury.

In the transition, the bZeroX founders also transferred control of their Administrator Keys to the DAO, which allowed the DAO to access and operate the Protocol and control the funds held in the smart contracts. How those Keys were used was determined by votes of Token Holders. Token Holders could propose any changes to the Protocol or to the direction of the DAO's business, usually after discussion on the DAO's online Community Forum, and usually after conducting a non-binding 'snapshot vote' of anyone on the Forum. If a Token Holder believed there was sufficient community support, the Token Holders would "vote" their tokens in a binding vote which occurred directly on the Protocol (blockchain software).

The CFTC contends that Ooki DAO is an unincorporated association comprised of Token Holders that used ("voted") their tokens to "govern" the Protocol. For example, the CFTC alleged that the DAO Token Holders voted to change the DAO name to Ooki DAO, and to use funds from the central DAO Treasury to compensate DAO users that lost funds due to security breaches and theft.

But the CFTC asserts that Ooki DAO never registered with the CFTC, as required by the CEA for most exchanges that enable commodity derivative transactions. Ooki DAO also did not implement a Customer Information Program or conduct Know Your Customer or anti-money laundering procedures, all allegedly in violation of the CEA.

II. Procedural Background

The CFTC filed its complaint on September 22, 2022. On September 27, it filed both a First Administrative Motion for Alternative Service and an Administrative Motion Supplement.

The Motion for Alternative Service requested permission to serve Ooki DAO "via the online mechanisms the Ooki DAO has created to allow itself to be contacted by the public," namely a "Help Chat Box" and "an online discussion forum" on its public website. The CFTC reiterated allegations from the complaint that Ooki DAO had been intentionally structured to attempt to render its activities "enforcement-proof" including by "erect[ing] significant obstacles to traditional service of process."The CFTC noted that it "took extensive steps to attempt to identify an individual authorized to accept service of process" on behalf of Ooki DAO but was unable to do so, in large part because Ooki DAO has no physical address or publicly identifiable persons associated with it. In the Supplement, the CFTC explained that it in fact served the documents through the Chat Box and Discussion

Forum and that soon after, a post appeared in the Discussion Forum acknowledging the litigation and discussing next steps. I granted its Motion for Alternative Service.

Four groups moved for leave to file amicus briefs: "LeXpunK is a community of lawyers and software developers dedicated to providing open source legal resources and support for DeFi [decentralized finance] and DAOs, providing a voice for groups that wish to use DeFi systems or associate through DAOs, and advocating for these communities." LeXpunK Mot. 2:8-11. DeFi Education Fund "is a nonpartisan advocacy group based in the United States with a mission to educate policymakers about the benefits of decentralized finances ('DeFi') and to achieve regulatory clarity for the DeFi ecosystem." DEF Mot. 1. Paradigm Operations LLP "is an investment firm that backs disruptive crypto-web3 companies and protocols." Para. Mot. 1:2-3. Andreessen Horowitz, known in this litigation as "a16z" is "a venture capital firm that invests in seed to venture to late-stage technology companies . . . with dedicated funds that have raised more than $7.6 billion to invest in crypto and web3 startups." Andreessen Horowitz ("a16z Mot.").

I granted the motions, permitted each amicus to file an amicus brief, and construed those briefs as Motions for Reconsideration regarding my order granting alternative service. ... I held a hearing on December 7, 2022 at which counsel for the CFTC and for the four amici appeared. ...

Discussion

The amici's arguments fall into two main categories: (1) Ooki DAO can neither be served nor stand as a defendant in this case because (A) it is a technology, not an entity, (B) it is not subject to enforcement under the CEA, and (C) it is not an unincorporated association; and (2) even if Ooki DAO is an unincorporated association and subject to enforcement under the CEA, it was not properly served here under federal or state service provisions. I address each argument in turn.

I. Ooki DAO as an Entity

The amici argue that Ooki DAO cannot be sued at all, and therefore cannot be served at all, because it is not an entity that can be sued or accept service and that the CFTC failed to allege otherwise in the complaint. The amici sub-arguments to this point both overlap and are distinct in certain ways, so I group some together and separate others into the following categories.

A. The CFTC Is Suing an Entity, Not a Technology.

First, the amici contend that Ooki DAO is a technology, not an entity or group of persons, and so suing it is akin to suing any other technology, or like trying to hold "the internet" liable. But the history of the development and control of the Protocol shows that this is incorrect, at least in this specific case.

The CFTC's complaint alleges that the Protocol was developed by two individuals who controlled it via their LLC, bZeroX—including by making changes to the software, deciding to distribute funds to defrauded users, and eventually choosing to transition control of the software—through use of their Administrator Keys. When control of the software transitioned to Ooki DAO, control of those Keys transitioned to Token Holders. Those Token Holders, according to the CFTC, comprise Ooki DAO, and it is their actions and choices taken on behalf of the DAO that the CFTC seeks to hold liable. The CFTC would have been able to sue bZeroX, LLC as an entity for its use of Keys to control and govern the Protocol. The CFTC may now sue Ooki DAO as an entity for its use of Keys to control and govern the Protocol. That the CFTC is choosing to sue the organization rather than the Token

Holders individually is a litigation strategy the CFTC is permitted to make, at least at this preliminary stage before the parties can litigate otherwise.

B. The CFTC Need Not Prove, At This Point, That Ooki DAO Is Subject to Liability Under the *CEA* .

Amici argue that Ooki DAO is not subject to suit under the CEA because it is not a person or unincorporated association. Amici also contend that the CFTC must instead pursue its claims against individuals, or alternatively that individual DAO participants cannot be liable under the CEA merely for voting on Ooki DAO governance.

The CEA assigns liability to "[a]ny person" who takes particular actions, 7 U.S.C. § 13c(a)-(b) , and defines "person" to include "individuals, associations, partnerships, corporations, and trusts," *id.* § 1a(38); *see also id.* § 2(a)(1)(B). The CFTC alleges that Ooki DAO is an unincorporated association and therefore falls within the definition of "person" in the CEA, which encompasses "association." The amici disagree. But the briefs go back and forth between arguing whether an unincorporated association can be sued under the CEA, whether the DAO can be sued under the *CEA* , whether the DAO is an unincorporated association under the *CEA* , whether the DAO is an unincorporated association under federal or state law, and whether the DAO can be served as an unincorporated association (the final question is addressed *infra* Part II). The critical question for *this* motion is whether and how the DAO can be *served*, which requires answering if it has the capacity to be sued and if it was properly served in that capacity. The question of whether the DAO is subject to regulation under the CEA is a separate question that goes to the heart of the merits of this case. It cannot and should not be resolved on a Motion for Reconsideration or a Motion for Alternative Service. As such, I do not further analyze that question here.[6]

It is worth noting that the amici all argue that these questions cannot be put off for a later stage of litigation because, they assert, this litigation was designed to lead to default judgment so no defendant will appear to litigate the merits. I find this unconvincing in large part because of the reasons explained in Part II, that service was sufficient and that Ooki DAO received actual notice of this litigation, so Ooki DAO should be able to appear and argue the merits. If the DAO fails to appear, it will be because of its strategic decision, not because it was unaware of the lawsuit.

C. The CFTC Sufficiently Alleged that Ooki DAO Has the Capacity to Be Sued as an Unincorporated Association.

The CFTC is suing Ooki DAO as an unincorporated association. Amici argue that Ooki DAO is not an unincorporated association and cannot be sued as such. ...

Amici correctly point out that California provides a mechanism for unincorporated associations to be sued via California Civil Procedure Code section 369.5(a): "A partnership or other unincorporated association, whether organized for profit or not, may sue and be sued in the name it has assumed or by which it is known." This capacity rule applies here if Ooki DAO constitutes an "unincorporated association" under state law. ...

California state law defines an unincorporated association as "an unincorporated group of two or more persons joined by mutual consent for common lawful purpose, whether organized for profit or not." Cal. Corp. Code § 18035(a). "The criteria applied to determine whether an entity is an unincorporated association are no more complicated than (1) a group whose members share a common pur-

pose, and (2) who function under a common name under circumstances where fairness requires the group be recognized as a legal entity. Fairness includes those situations where persons dealing with the association contend their legal rights have been violated." *Church Mut. Ins. Co., S.I. v. GuideOne Specialty Mut. Ins. Co.*, 72 Cal. App. 5th 1042, 1059, (2021), *as modified on denial of reh'g* (Jan. 11, 2022).

For several reasons, I conclude that the CFTC sufficiently alleged, for the purposes of their service motion, that Ooki DAO is an unincorporated association under state law.

First, the CFTC shows that Ooki DAO is a "group of two or more persons." As discussed above, the amici contend that the DAO cannot establish this requirement because the DAO is a technological tool, not a group of persons. But as discussed above, the CFTC sufficiently explained that it is suing the DAO, which is comprised of individual Token Holders. And the amici do not assert that the Token Holders are not persons. This element is satisfied.

Second, the CFTC sufficiently showed that two or more persons joined Ooki DAO "by mutual consent." Amici contend that different persons casting different votes at different times does not constitute mutual consent. That argument misunderstands the element, which asks whether the persons *joined* by mutual consent. Here the bZeroX LLC founders formed Ooki DAO and transitioned control of its governance—including its Treasury funds—to the Token Holders. There are no factual allegations (or arguments made by amici) that suggest this formation or transfer of power was not consensual. Nor are there allegations or arguments that suggest any Token Holders did not "consent" to the inherent power that came from holding a token and thus being able to play a role in governance choices. And if Token Holders did not "consent" to this power, they could have sold or given away the tokens, as amici themselves point out. Additionally, choosing to vote or abstain on particular actions at different times does not preclude a finding of mutual consent. The underlying common goal—as discussed in the next paragraph—was to govern the DAO. Voting against a proposition that was ultimately implemented does not mean a particular Token Holder did not consent to govern the DAO.

Third, the CFTC sufficiently demonstrated that Ooki DAO has a "common lawful purpose," despite amici's contentions to the contrary. As outlined in the complaint, Ooki DAO is comprised of Token Holders who own tokens that can be used to vote on certain governance decisions, which may include pausing or suspending trading, making changes to the software protocol, distributing funds from the central Treasury, or choosing to rebrand the DAO. The common purpose is governing the DAO, particularly through the use and distribution of funds from its central Treasury. Contrary to amici's contentions, it is irrelevant that some Token Holders voted against certain decisions or that they abstained from voting.[8] Not voting and voting against a proposal are both voluntary choices made to further the common purpose of governing the DAO. Indeed, based on the complaint it seems that individuals who own but do not vote their token still comprise the DAO because the purpose of holding a token is being able to vote on the DAO's governance. There are no other factual allegations that provide for other reasons to hold tokens, and the amici do not offer any alternatives. Thus, the DAO and its Token Holders have a common objective: making choices to govern the DAO.

And, as the CFTC alludes to, it is not inherently unlawful to operate retail commodity exchanges; doing so merely requires following federal regulations. The CFTC does not assert that the purpose of Ooki DAO was to violate these regulations, despite its assertion that the structure was chosen to avoid regulations.

Rather, based on the complaint, it seems the purpose of the DAO was to govern the use of new technology to provide a relatively easily accessible software platform for users to trade, invest, and bet on virtual currencies. Providing this technology—and governing its use—is not inherently unlawful, even if the CFTC asserts that Ooki DAO did not comply with all applicable laws when doing so.

As counterargument, amici rely heavily on various state law cases explaining that street gangs are not unincorporated associations under California law because they were not formed for a "common lawful purpose." For hopefully obvious reasons, Ooki DAO is very different from a criminal gang under the Penal Code, a terrorist group with no social benefits. Amici themselves contend that the blockchain technology used by Ooki DAO could "be used to solve a host of social problems," and that the decentralized finance software specifically used by Ooki DAO is "novel technology" that "let[s] people all over the world interact over the Internet in 'peer-to-peer' trading, borrowing, and lending," These activities can be lawful, and may provide social benefits, if implemented within the confines of the law. The gang cases are inapposite. The CFTC sufficiently established common lawful purpose for the purposes of capacity here.

Finally, the CFTC sufficiently shows, for the purposes of capacity, that Ooki DAO functions under a common name under circumstances where fairness requires the group be recognized as a legal entity. No amicus contests that "Ooki DAO" is the common name. And at this point in the proceeding, fairness requires recognizing the DAO as a legal entity because as alleged in the complaint, the Protocol itself is unregistered in violation of federal law, and *someone* must be responsible. Holding responsible the entity that governs the Protocol is fair—again, at least for the purposes of the present motion.

For those reasons, Ooki DAO has the capacity to be sued as an unincorporated association under state law. ...

II. Service on Unincorporated Associations ...

B. Service Under California Code of Civil Procedure Section 413.30

Under section 413.30, service must be reasonably calculated to give actual notice to the party being served. ... Amici argue that even if section 413.30 governs service, the CFTC failed to meet the requirements because service via the Chat Box and Forum was not reasonably calculated to provide actual notice to the voting Token Holders, and that those methods of service did not in fact provide actual notice to the voting Token Holders. ...

Here too Ooki DAO has structured its business—at least as alleged by the CFTC—in such a way that it can only be contacted via its online website, or perhaps through its social media accounts. As alleged by the CFTC, and not seriously contested by the amici, Ooki DAO has no easily discoverable address. Its Chat Box and Online Forum seem to be the DAO's chosen and preferred method of communication, which is only bolstered by the fact that posts recognizing service of the litigation documents for this case appeared in the Online Forum. And even though many courts permit service via social media or publication on a website *alongside* service via email, that is apparently not possible here, where the only forms of communication the DAO presents to the public are through the Chat Box and Discussion Forum. Thus while service via Chat Box and Forum themselves may be new, decades-old circuit court reasoning, along with more recent extensions to new technology, confirms that these choices were reasonable.

There are two reasons why posting on the Chat Box and online Discussion Forum was reasonably calculated to apprise Ooki DAO of this litigation. First, the

CFTC alleges that Ooki DAO controls its website via Token Holders voting on Administrator Keys to make changes, including to branding. It is highly likely then that Ooki DAO saw a relatively provocative post on its website, especially one that has generated so much attention with Ooki DAO users and throughout the national media. In this case, posting on the defendant's website's online discussion forum, which was dedicated to conversation about the defendant's business, was reasonably likely to apprise the defendant of the ongoing litigation.

Second, the CFTC alleges that Ooki DAO is comprised of the Token Holders, meaning that service reasonably calculated to notify the Token Holders would reasonably notify the DAO itself. And the CFTC asserts that the Token Holders generally take "snapshot votes" of governance proposals before taking binding votes. Those snapshot votes are prompted by topics discussed on the Discussion Forum. The CFTC alleges that the Token Holders generally do not vote on proposals that do not pass a snapshot vote—and because those votes are prompted by and directly acknowledge the Discussion Forum, this means that at least some Token Holders are directly informed about what occurs in the Discussion Forum. Posting notice of this litigation in that same Forum, then, is reasonably calculated to notify *at least some* Token Holders of the ongoing litigation. And as the amici concede, the CFTC was not required to serve and notify each and every Token Holder. This is particularly true because the CFTC is suing the DAO, not the individual Token Holders.

Additionally, at least in this specific case, it seems clear that Ooki DAO received actual notice. Service via the Chat Box and Forum led to a flurry of discussion on the Forum and Ooki DAO's other public communication channels, including its Twitter account. Notably too, this case has been the subject of significant national media coverage. Four amici heard of the case and filed briefs to join litigation. While none of these facts independently confirm that Ooki DAO received notice of litigation, taken together they provide more than enough support that *in this particular case* Ooki DAO has notice of this lawsuit.

Therefore, service via the Chat Box and Online Forum meet the service requirements under California's alternative service provision, and also meet constitutional due process requirements.

C. Service of Individuals

Finally, amici contend that the CFTC should have served individual Token Holders or demonstrated why serving them was impracticable. They assert that the CFTC was required to identify individual members and was in fact capable of doing so, since the agency previously filed and settled a proceeding against the bZeroX LLC founders. Because the CFTC should have served individuals, amici argue, permitting alternative service was inappropriate, and the CFTC instead should have sought early discovery "to determine the identity of fictious defendants" or should have instead sued Doe defendants. In response, the CFTC argues that its lawsuit is against Ooki DAO as an entity, not against individual Token Holders, and the entity was properly served, Moreover, it is unable to identify individual Token Holders because of the decentralized and anonymous nature of Ooki DAO.

I agree with the CFTC that it sued Ooki DAO as an entity and did not sue the individual Token Holders. The choice to sue the entity instead of the Token Holders makes sense in light of its focus on Ooki DAO's governance through use of its Treasury funds; there are no allegations—and the amici do not contend—that individual Token Holders could control the Treasury funds. If the CFTC ultimately seeks damages or fees of any kind from the Treasury funds, it is not clear that the

agency could require Token Holders to provide those individually. And, as analyzed in the previous section, service of Ooki DAO as an entity was proper because it was reasonably calculated to give the entity actual notice, and indeed apparently gave the entity actual notice. Finally, because the complaint was intentionally and specifically filed against the entity, not individuals, I reject amici's arguments that the CFTC should have sought early discovery to identify fictitious defendants, or should amend its pleadings to include Doe defendants. ...

The CFTC has utilized all of the information reasonably at its disposal to serve Ooki DAO, and it is clear that Ooki DAO has actual notice. Service was proper and complied with due process requirements.