

Tornado Cash Charges Set Stage For Clash Over 'Control'

By Aislinn Keely

Law360 (August 28, 2023, 8:48 PM EDT) -- The recent charges against co-founders of Tornado Cash accuse them of allowing North Korean hackers to funnel billions of dollars through the system, but experts say the decentralized structure of the so-called crypto mixer could complicate the government's case as it looks to prove the founders actually control the platform.

The Wednesday indictment claims that Roman Storm, a naturalized U.S. citizen, and Roman Semenov of Russia "developed, marketed, and operated" the crypto mixer known as Tornado Cash, a service that breaks down and batches crypto transactions in order to obscure the path of funds. The sanctioned North Korean cybercrime organization known as the Lazarus Group has allegedly sent billions of dollars through the protocol, and the government claims that Storm and Semenov knowingly facilitated those transactions through their work on the platform.

The co-founders face charges of conspiracy to commit money laundering, conspiracy to operate an unlicensed money transmitting business and conspiracy to violate a statute that prevents transactions with sanctioned entities, but the platform's claims to decentralization may make the links between the founders and the activity less straightforward than those of a traditional business.

Who's in Charge?

Storm and Semenov created the platform in 2019 with a third developer, Russian national Alexey Pertsev, who is not named in the indictment, though the filing refers to a third co-founder as CC-1. Pertsev is awaiting trial in the Netherlands on money laundering charges for his work on the protocol.

At the time of the platform's creation, Storm and Semenov allegedly had control over the platform since they maintained the so-called private keys of the service's smart contracts. This enabled "complete control over the Tornado Cash service," according to the government.

As the controllers of the platform, the founders failed to implement anti-money laundering controls and knowingly permitted sanctioned entities to send billions in proceeds from hacks and other illicit activities, effectively facilitating those transactions from 2019 until August 2022, the indictment said.

According to Leah Moushey, counsel with Miller & Chevalier, the prosecution will have to be "crystal clear" in demonstrating that the individuals had control over the services at the time the alleged violations occurred.

"I think a lot of this is going to come down to the sort of technical aspects of the level of control that the purported founders had and at what point they, to the degree that they did, relinquished control over the aspects of Tornado Cash," Moushey said.

Those technical aspects could get complicated. By May 2020, the indictment said, the founders announced that the smart contracts governing the service had been updated to remove those keys, "meaning that no one could further modify those smart contracts," according to the indictment.

Instead, a so-called decentralized autonomous organization known as the Tornado Cash DAO took over the governance of the protocol. This meant users collectively governed Tornado Cash by voting on community decisions through the use of governance tokens, known as TORN. While the DAO collectively controlled the ability to update Tornado Cash, some of its decisions instituted systems that led to financial gains for Storm, Semenov and others, according to the government.

While Storm and Semenov no longer had control over the governance of the platform itself, they allegedly "exercised control" over the website many used to access the protocol and paid for services to host the site the entire time leading up to the indictment. While the user interface wasn't necessary to transact using Tornado Cash, it made things considerably easier, since interacting with smart contracts directly required considerable technological skill.

Despite the complexity, said Crowell & Moring partner Caroline Brown, who previously served as an attorney with the Department of Justice and U.S. Department of the Treasury, the government is likely prepared to address the layers of control.

"The government obviously thinks that there's enough facts and evidence to support its case that the founders did have control over the smart contracts such that they could have employed these [anti-money laundering] sanctions controls but opted not to," Brown said.

What Are They in Charge Of?

Tornado Cash purports to be decentralized, governed by smart contracts and a coalition of token holders, rather than the control of an individual or entity. But according to the government, it's a money transmission business, and Storm and Semenov operated it to turn a profit.

The indictment claims Storm, Semenov and others operated Tornado Cash as an unlicensed money transmitter since the service "engaged in the business of transferring funds on behalf of the public." But Michael Bresnick, chair of Venable LLP's financial services investigations and enforcement practice, said he expects that charge to be challenged.

"The question for this case and what the government is going to have to prove ... is, 'Did this business truly act as a money transmission business, or was it just a software provider?'" Bresnick said.

One thing Storm and Semenov may point to in their defense is guidance from the Financial Crimes Enforcement Network on the definition of a money transmitter, according to Bresnick and others. The 2019 guidance directly states that "an anonymizing software provider is not a money transmitter."

"This is because suppliers of tools (communications, hardware or software) that may be utilized in money transmission, like anonymizing software, are engaged in trade and not money transmission," the guidance said.

According to crypto advocacy group Coin Center, the factual allegations against Semenov and Storm could fall under FinCEN's guidance on anonymizing software providers.

"While it is true that by performing these 'delivery, communication or network access services,' the defendants made it easier for individual users to access and use the Tornado Cash smart contracts in order to transmit money, that doesn't somehow mean that they became transmitters merely because they provided tools that others used to transmit their own money," Coin Center said in a blog post published the day of the indictment.

What Did They Do?

Storm and Semenov are separately charged with violating an anti-money laundering statute that prohibits the attempt to conduct a financial transaction "to conceal or disguise the nature, the location, the source, the ownership or the control of the proceeds of specified unlawful activity."

According to the government, Semenov and Storm knew the proceeds on the platform involved wire fraud and computer fraud based on a series of messages produced in the indictment. In one message referenced in the indictment, Semenov allegedly sent Storm a link to a blockchain analysis that claimed more than 90% of all the deposits on the platform derived from criminal exploits.

Similarly, a final count alleges the pair conspired to violate the International Emergency Economic Powers Act, an executive order that prohibited transactions with sanctioned cyber actors by knowingly receiving and causing others to receive funds from the Lazarus Group.

According to Crowell & Moring's Brown, the fact that the founders allegedly knew the origin of the proceeds on the platform is key to the government's case.

"It's not just the operation of software; the indictment alleges that the founders knowingly engaged in illicit activity and that they knew there were criminal actors that were using Tornado Cash to launder money," Brown said.

Who's on Notice?

The Tornado Cash criminal case came not long after a Texas federal judge upheld a separate sanctions order against the service, rejecting an August 2022 challenge from users. The users had accused the U.S. Treasury Department of overstepping its sanctions authority to limit access to what they argued was public software, but the ruling found that Tornado Cash and its DAO formed an association that could be sanctioned.

James Burnham, a principal at boutique firm King Street Legal, said that while the criminal case against the Tornado Cash founders is a landmark one that will put questions of control and decentralization to the court, all of decentralized finance shouldn't panic just yet.

While Burnham, who worked on multiple amici briefs supporting users in the Treasury sanctions challenge, said the criminal case makes similar assumptions to the Texas ruling about the nature of the protocol and the founders' control, the Justice Department may be focused on a narrow set of circumstances.

"I would be reluctant to assume that this is the government announcing some major shift in legal policy that they're attempting to achieve versus a narrower enforcement action," he said.

Still, Brown of Crowell & Moring said the recent Texas ruling upholding the sanctions on the platform coupled with the indictment should be a reminder to DeFi or decentralized finance developers that they need to seriously consider the sanctions and AML risks as they're developing new projects.

"It says that the government is going to go after anyone who knowingly commits money laundering and sanctions violations," she said.

The government is represented by Nathan Martin Rehn of the U.S. Attorney's Office for the Southern District of New York.

Counsel information for Storm and Semenov was not immediately available.

The case is USA v. Storm, case number 1:23-cr-00430, in the U.S. District Court for the Southern District of New York.

--Editing by Robert Rudinger.