



1177 Avenue of the Americas, 5th Floor
New York, NY 10036

Owl Explains' Public Comment on NIST [IR 8472](#) ipd "Non-Fungible Token Security"

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National Institute of Standards and Technology
Attn: Computer Security Division, Information Technology Laboratory
100 Bureau Drive (Mail Stop 8930) Gaithersburg, MD 20899-8930

Submitted Via Email To: NISTIR8472@nist.gov

To whom it may concern:

Owl Explains appreciates the opportunity to comment on NIST IR 8472 ipd "Non-Fungible Token Security" (the "NFT Report"). The NFT Report is an important step towards systematic security approaches to promote secure design and implementation of NFT creation, implementation and transacting. More importantly from our perspective, the NFT Report clearly recognizes that "[NFT] technology provides a mechanism to enable real assets (both virtual and physical) to be sold and exchanged on a blockchain. It does this by creating a unique blockchain token to represent each *asset*." This core insight, we believe, is too often overlooked by policymakers and regulators around the globe. We call this insight "sensible token classification," which we discuss in more detail below. We applaud NIST for being, as usual, at the forefront of understanding technology and hope that the NFT Report will receive a great deal of publicity on this basis alone.

Owl Explains is a project led by the legal team at Ava Labs, Inc. that aims to support workable regulation of blockchain and cryptoassets (also called "tokens") through a set of guiding principles known as the [Tree of Web3 Wisdom](#) – and a system for determining the legal and regulatory treatment of cryptoassets according to their true nature (functions and features) known as the [sensible token classification system](#). More information about the initiative appears at the end of this letter.

We are heartened to see an agency as respected and renowned as NIST acknowledge the core of what blockchain and tokenization does. At Owl Explains, we make the following points to describe tokenization:

- Cryptoassets (tokens) are not all the same. They are not a homogenous asset class.
- This is true because tokens are digital representations of assets, items, and things and therefore can represent anything.
- Accordingly, tokens cannot be treated all the same under law and regulation, and many types of tokens are not financial instruments.
- Many tokens represent assets, items, or things that are already regulated so do not require new regulation.
- Many other tokens represent items that are not regulated in the non-blockchain world because they do not require it and so should not be regulated simply because they are tokenized on a blockchain.

In just the last year, we have made these points in response to reports or guidance from the Internal Revenue Service ([here](#) and [here](#)), the Financial Accounting Standards Board ([here](#) and [here](#)), the Government Accounting Office ([here](#)), the International Organization of Securities Commissions ([here](#)), and joint work by International Monetary Fund and Financial Stability Board ([here](#)). Commissioner Mersinger of the Commodity Futures Trading Commission (“CFTC”) is a [fan](#) of sensible token classification, which makes sense because the CFTC was one of the earliest regulators to recognize it in LabCFTC’s Digital Asset [Primer](#).

Here is more of how we articulate these points: Blockchain is a new technology, but in essence it is simply a new kind of database or filing cabinet. When it comes to law and regulation, treating all cryptoassets the same simply because they are tokenized representations recorded on a blockchain makes as little sense as treating a sketch, an ID card, a receipt or a share certificate all the same because they are printed on paper and filed in the same filing cabinet.

Instead, policymakers and regulators should treat each token according to what it actually represents - just as they do with things written on paper. By looking at a cryptoassets functions and features, we can determine its utilization, valuation, and classification (including for legal/regulatory purposes).

The good news is that the majority of tokens represent things that already existed before blockchain and can be treated as legal or illegal, regulated or unregulated just as they always have been. Policymakers should simply scrutinize what the token actually represents - its features, functions and risk profile - and apply existing laws and regulations - or not - accordingly. This way regulation stays consistent across different technologies - same asset, equals same risk, which results in the same legal and regulatory treatment.

The Owl Explains [sensible token classification system](#) breaks tokens down into the following five high level categories that represent the vast majority of use cases today and into the future:

Physical asset tokens: Any digital representation of a tangible (real-world) asset created and maintained on a blockchain (also known as “DLT” for distributed ledger technology). This category is very broad and could be divided into smaller categories based on the particular type of tangible asset (e.g., gold coin physical asset tokens, Air Jordan physical asset tokens, cup of coffee physical asset tokens versus coffee cup physical tokens, etc.).

Services tokens (includes music, digital art); Any digital representation of services to be provided by one or more persons/entities to other person(s)/entities. This category also includes music and purely digital art files (the intellectual property underlying the music or digital art file may be an intangible asset token, discussed next, if not transferred with the file). This category is also quite broad because it includes any type of services and digital art/music such that it is susceptible to sub-categorization (e.g., cleaning services tokens, personal performance tokens versus concert ticket tokens, legal services tokens, etc.).

Intangible asset tokens: Any traditional intangible (non-physical) asset. Another broad category susceptible to sub-categories based on the asset class (bond tokens [security tokens], intellectual property rights tokens, government program tokens, loyalty points program tokens, etc.).

Native DLT tokens: A narrow category of truly DLT-native tokens (e.g., Bitcoin, Ether, AVAX, etc.). Might be a subset of intangible asset tokens in the sense that these tokens are just a bundle of rights with no physical item involved, although some may have an element of services (e.g., when the token is used for resource allocation on the network). The classification system treats native DLT tokens as not a subset of intangible asset tokens because the latter must be something that exists (or can exist) distinct from the blockchain that creates and maintains it. Native DLT tokens have no existence or purpose without the associated blockchain. This [paper](#) by Professor Carla Reyes is instructive.

Stablecoins: A narrow category of tokens that do not fall within any other category and are designed to maintain stable value against some underlying, reference or linked asset or pool/basket of assets. Usually applied to fiat currencies. This category should not be broadened to swallow all the other categories.

You can understand why we are so encouraged by the NFT Report and NIST's understanding of tokenization. We hope all policymakers and regulators start their activities with reference to the fundamental principles in the NFT Report and the [sensible token classification system](#) as a way to orient their efforts.


About Owl Explains

Owl Explains is a project created by the Legal team at Ava Labs with the goal of becoming a trusted educational resource for policymakers, regulators, and other parties interested in learning about blockchain technology, cryptoassets, and Web3. Owl Explains develops content delivered by leading industry experts, including [podcasts](#), [explainers](#), [articles](#), and [quizzes](#), focusing on understanding the technology and the full breadth of its use cases, distinguishing where those use cases fit within existing regulatory frameworks, as well as defining principles for regulation based on the nature of the asset and activity. Innovation is the soil from which we can create a better Internet. Blockchain is its root system: decentralized, transparent, secure, and traceable. We believe that workable regulation in conjunction with innovation and invention is the best way to guide the transformative power of Web3 to empower individuals and businesses, drive economic inclusion, and benefit the planet. As such, the Owl has developed the [Tree of Web3 Wisdom](#), a set of principles to help guide blockchain and crypto regulation worldwide.

Conclusion

We urge all policymakers and regulators to read the NFT Report and adopt the principles of the sensible token classification system as part of their work on crypto and digital assets. Treating all tokens the same, particularly as more and more traditional assets are tokenized, is not workable because it is neither technology neutral nor efficient. We would be happy to discuss further.

Sincerely yours,

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Lee A Schneider
General Counsel
Ava Labs, Inc.