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Discussion Series

Blockchain, Brokers & Web3

Can Congress Fix The Infrastructure Bill
and Grow The Decentralized Web?

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Tech Policy Recess: Blockchain, Brokers & Web3: Can Congress Fix The Infrastructure Bill and Grow The Decentralized Web? January 14 2022

Bill Rockwood

Greetings, everybody. Welcome to January's tech policy recess event and we're going to get by a technicality there because today's a nonvoting day. My name is Bill Rockwood. Today we're discussing Blockchain, Brokers and Web3, Can Congress Fix the Infrastructure Bill and Grow the Decentralized Web? Before we get into the panel discussion. I want to note that this event is hosted in conjunction with both the Congressional Internet Caucus and the Congressional Blockchain Caucus and its co chairs. For the Congressional Blockchain Caucus, its co-chairs are Darren Soto, Tom Emmer, Bill Foster. and David Schweikert. Internet Caucus, the co-chairs are Congresswoman Anna Eshoo, Congressman Michael McCaul, on the House side. On the Senate side, it's Senators Patrick Leahy and John Thune.

Today we wanted to catch up on some legislative language from the Infrastructure Bill that passed last session. The bill imposed new reporting requirements for certain cryptocurrency transactions. The legislation used a broad definition of the term "brokers" that could encompass minors, validators, and developers, or wallets, who are simply unable to comply with those recording requirements. When it was passed, many said the goal of preventing tax evasion should

not come at the expense of stifling innovation in a nascent industry by imposing unworkable regulations.

Today, we wanted to have some experts weigh in with a little more detail on the bill's impact on innovation, and where we should go from here. Tim Lordan from the Congressional Internet Caucus Academy will moderate the discussion, and I will hand it off to him from here. Thank you so much for joining us today.

Tim, let me hand it over to you.

Tim Lordan

Thanks, Bill. And thanks to the Congressional Blockchain Caucus for co-hosting this with us.

As Bill said in his introduction, again, my name is Tim Lordan. And in the introduction, the goal of this particular conversation is to look at the unintended inadvertent consequences of the infrastructure bill revisions to some of the reporting requirements in language for brokers, and we wanted to maybe flesh out a little bit more what those impacts were. Bill just mentioned a few of them, but we wanted to go in a little more detail and see if we can expose the growing decentralized web ecosystem, that is when it goes far beyond cryptocurrencies into other software development, and things where a lot of folks are saying that this is the way the Internet is going, into a more decentralized fashion. You've heard that from Jack Dorsey, you've heard that from Andreessen Horowitz, and, in fact, they had a Twitter spat about this recently. So, we think it's timely that we just drill down a little bit more in detail on what happened to the infrastructure bill, and we're getting close to some solutions that are coming online soon that will deal with some of those inadvertent consequences.

But first, let me just go quickly to Jacob Hample from the Blockchain Association. Jacob, can you just explain what the original intent of the legislation was, the broker definition, the change to the 6050i reporting IRS form, and then what are the inadvertent impacts on the actors in the space, and how it affected them?

Jacob Hampel

Hi, can everyone hear me? I froze there for a second.

Tim Lordan

We hear you.

Jacob Hampel

Okay, great. That was pretty unfortunate timing.

Thanks for the introduction, Tim. Hi, for those of you who don't know me, my name is Jacob Hampel. I work on Tax Policy and Government Affairs for the Blockchain Association. To give a brief overview of what happened with the infrastructure debate, I think it's a decent case study in what happens when things maybe move too quickly without, I guess, a full picture into how other connected areas will be impacted. It's fair to say the goal of the crypto provisions in the infrastructure bill was to provide taxpayers with the information they need to easily and quickly and efficiently pay their taxes, the way that a lot of other people pay their taxes with traditional securities when they get a 1099 form from their stock brokerage, for instance. That's been a policy that's been very helpful for consumers so they know their tax liability so that they're able to get everything squared away come April and tax season.

As an industry, we've been discussing the steps that we're going to be taking to enact this process with the IRS and the Treasury Department for a while. As a lot of us are used to now in Washington, though, sometimes when you have some of these big bills, like the Bipartisan Infrastructure Bill, where there's an opportunity to get some language passed, sometimes there's a rush to get as much language in there, that might be under consideration for various different policies, as you can. What we ended up having in that circumstance was some language that, as crafted, was not really tailored very effectively with good definitions, or phraseology, with how the blockchain system functions as a whole, and it saw that there's a lot of potential for the provisions to applied to a large umbrella, to various different assets that happen to be stored on a blockchain, but might not necessarily be the assets that the people who are writing legislation might have intended.

Where that is now is that, now the legislation is passed, the industry's been engaging with the IRS and the Treasury Department, as well to try to get some more clarity on these issues, but I think it's still very important to keep members of Congress and congressional staff informed about the progress of all of these discussions in case there is some tweaking that's appropriate in future legislation.

Tim Lordan

Jacob, that's great. It really sets the stage for what happened, what the inadvertent consequences were, and then now we're going to go on as part of the discussion to flesh that out a little bit. To do that I wanted to welcome, also, Marta Belcher, who's the Chair of the Filecoin Foundation. She's also general counsel and head of policy at Protocol Labs, and special counsel for the Electronic

Frontier Foundation, and also, Tim Massad, who's a research fellow at the Harvard Kennedy School, and adjunct professor at Georgetown University Law School, which is right at the base of the Hill.

So, with that said, Jacob laying out the unintended consequences of the bill, Marta, he's explaining that things that were affected by the bill went far beyond cryptocurrencies, affecting other actors in this decentralized space. Now, we've seen a lot of discussion in Washington even, recently, because Twitter and Block CEO Jack Dorsey has gotten a little bit of a Twitter spat with Marc Andreessen, from Andreessen Horowitz, on what Web3 is. We've also had some interesting pieces written by Moxie Marlinspike, who's well known on the Hill, and from the cybersecurity side, about NFTs and the decentralized web. Web3. There's been so much conversation since the infrastructure bill passed, can you explain what Web3 or the decentralized web is all about? And how it fits into this piece of the puzzle?

Marta Belcher

Absolutely. Really, what we're talking about is potentially the next generation of the Internet. And I think the best way to think about the problems of the decentralized web can solve is to really start with a look at today's Internet and its vulnerabilities. Today's Internet is centralized. The vast majority of data that makes up the websites that Americans are using every day, sits in data warehouses that are owned by just three companies, Amazon, Microsoft, and Google. When those companies suffer blackouts, vast swathes of the web, go down for hours, including websites that are massive contributors to the American economy. We saw that just last month, with an Amazon Web Services outage shutting down a bunch of online services critical to everyday life. That's really the problem with having single points of failure.

Why is that? Well, it's because on today's Internet, if I were to go to a web page, that information is being retrieved from a particular server somewhere in the world, maybe very far away from me. I'm going to a particular web page in a particular place and hoping it's still there. Imagine you just read a really great book in physical hardcopy, and instead of telling your friend about the book by recommending it by its title, you say, it's in the New York Public Library on the third shelf from the left five books over. That's how today's Internet works. To see that book, you have to fly to New York and go to the public library and find the place on the shelf where that book is supposed to be. But maybe it's not there, or someone moved it, or someone tore out the pages. Or maybe you get there and you realize you had that book in your backpack the whole time.

So again, that's today's Internet, and it makes a lot more sense to just tell your friend the name of the great book you just read, and let your friend find that book by its name rather than its

location. That's really where the decentralized web comes in. It really allows you to have not just centralized places where you have to go to get files, but rather a decentralized model, a better version of the web where you can combine the storage capacity and computing power on many individual devices spread out in like a supercomputer type network, and store multiple copies of the data across those devices.

This, we think, is the next generation of the Internet, and it's really designed to redistribute power online from centralized services to individual users. On this decentralized web, multiple nodes can fail without the entire system falling apart, and the availability of information is not dependent on any one server or company. It's really providing a much more robust platform for humanity's most important information. On the DWeb, data is really distributed across the network and users can control their data and choose where and with whom to share it.

Just to give you one example, the project I work on, Filecoin, is a blockchain-based decentralized storage network. We're really using this decentralized web concept to store what we call humanity's most important information. Just one example is the Starling Lab, which is a project of Stanford and USC, uses the Filecoin network to permanently preserve the USC Shoah Foundation's archive of 55,000 video testimonies of genocide survivors. It was also used to document election security in the 2020 US elections. This is just an example of how having this more robust platform can ensure that humanity's important information can continue to be preserved into the future.

Tim Lordan

Marta, That's great, and really interesting. There's a whole evolving ecosystem that people in Washington are not really paying attention to, it really feels like to us. As I maybe said at the beginning, the Congressional Internet Caucus Academy has been doing these briefings pretty much every month since 1996, which is kind of insane, it's like 26 years or something, and when we started doing briefings on the Hill on these on the Internet policy issues, a lot of folks were just like, this looks stupid, this Internet thing is not going anywhere. And we were, like, well, we think it has promise, and you probably should start paying attention to it, and thinking about it more critically, when it comes to a policymaker perspective. We feel like the same thing is happening now with the decentralized Web in 2022, that happened in 1995, 1994, where people really weren't paying much attention to it, and dismissing it as silly. So, thank you for that introduction of what the decentralized web is, and some of those use cases are really fascinating.

Tim, the other Tim, I'm gonna go to you, when whoever wrote the legislation -- I don't actually happen to know whose fingerprints are on it -- when they wrote this legislation, I assume they weren't trying to target anything other than people that are acting as brokers for cryptocurrencies,

and they probably had no idea that this whole other ecosystem of software development and things were going on. What do you think was their intent, and how should this be a lesson for how they think about regulation going forward?

Tim Massad

Thanks, Tim, for having me here. I think the objective was to ensure that there is tax compliance in other words that people do report gains from crypto, not simply that they get the information that they need. Really, I see this issue as the first chapter of what very well could be a recurring battle, unless proponents of decentralized finance, in particular, embrace regulation, and recognize that they need to embrace regulation in order for DeFi to grow and become truly mainstream, that is, people see this, with customer requirements, with anti-money laundering requirements, with combating financial terrorism, and with federal compliance with regulatory standards.

Really the underlying issue here is that proponents of DeFi, decentralized finance, which is a collection of very exciting innovations that might replace, or at least speed up, some traditional financial processes and institutions, they can't have it both ways. On the one hand, you can't say DeFi can create a more democratic and inclusive financial system, and allow us not to have to rely on large trusted intermediaries like banks, if DeFi can't perform all the functions that banks and other intermediaries perform. All those traditional finance intermediaries do these things. They do the tax compliance, they do AML, they do KYC. DeFi needs to come up with ways to do that. Otherwise it's like saying -- it's as if Tesla said, I can produce electric cars that go much faster on far less energy than traditional ones because I'm not going to put brakes in them. That's true, but we're gonna have problems if you don't put brakes in the cars. DeFi has to come up with ways to do this.

It's not that it has to be done necessarily in the traditional ways. The ways that banks, even, have complied with various requirements have changed over the years. It used to be you had to walk into a bank and show your driver's license if you wanted to cash a check, you don't have to do that anymore, you don't have to do that even to open an account.

So, I think the burden is in part on DeFi, and Congress really should put the burden on the proponents of the industry to come up with ways, and not to hide behind the notion that, Oh its DeFi, there's no entity operating this therefore it can't be done. Truth is, there are some governance arrangements involved in any DeFi protocol, there are developers, there are sometimes Foundations involved, there are people who have governance tokens. I'm not necessarily saying we put the burden on them, but I think we do have to come up with ways that DeFi autonomous software protocols, that are seeking to replace traditional financial institutions

or provide the same services, can provide all the same compliance functions. Congress now requires antiquities dealers to do anti-money laundering. That was part of the Anti-Money Laundering Act of 2020. Surely an industry, as sophisticated as the crypto industry is, can come up with ways to do this.

I'd like to see it grow. I'd like to see us replace the market share of some of the centralized institutions in our financial sector, but it has to be done in a way where we still have compliance with the law.

Tim Lordan

Let me just ask Jacob or Marta, Tim's making a good point, but maybe flesh out a little bit. There are some people that do smart contracts, and maybe software development on the decentralized web, and Web3, or wallet providers. Can you flesh out how would they know who they're dealing with and, maybe from a technical perspective a little bit, help the audience understand that?

Jacob Hampel

Yeah, absolutely. Tim brings up an excellent point. The purpose in bringing attention to some of these issues is not necessarily to say some things are impossible, but it's rather to say, how do we make things possible, how do we start from a principled standpoint about what is needed, and then look at the best way to do that moving forward? We do see that, with a lot of development in so-called RegTech space, within DeFi for example, these days trying to leverage technology like zero knowledge proofs and other more advanced encryption technologies, in order to verify people without compromising consumers' privacy.

Because, at the end of day, when it comes to things like anti-money laundering policy, or tax policy, or any of the things where you need an identity, sometimes you don't literally need to know, Okay, this is Jacob who is transacting right here, in order to validate that I'm allowed to -- that I'm an American citizen. I've had all of my checks done that I'm not involved in any terrorist finance, or anything like that, but you need to know for sure that I have checked all those boxes, even though you might not actually need to have a big data trove of everyone who's ever actually done it. There are technologies that are in development now, and that are really promising for these things, but it will take time.

These are the conversations we're having with regulators like the IRS, like FinCEN, the Financial Crimes Enforcement Network, about what is the best way to get the best possible outcome for everyone involved, and maybe even to find a system that would have more applicability to legacy finance as well, that could help improve AML compliance on that end as well, because, as we know

from the AML acts that Tim mentioned earlier, there's a lot to be improved upon with our current AML system, too. So, hopefully, that's a way we can move forward in a positive manner.

Tim Lordan

Then, Marta, when this legislation was passed, and people started talking about what it would affect -- and by the way, when it was when it was introduced, it was essentially written in stone as far as a process perspective, because no amendments were allowed on the legislation, it was essentially as immutable as the blockchain -- but, when this was introduced, and people started talking about the inadvertent impacts of this, how was it received, at the Filecoin Foundation and Protocol Labs, you guys working on these public interest technologies? How do people feel about it over there?

Marta Belcher

Well, I have multiple hats, and one of my hats is actually unrelated to Protocol Labs and the Filecoin foundation, I'm also a special counsel at the Electronic Frontier Foundation, there I focus on issues involving cryptocurrency and civil liberties. For me, the infrastructure bill really was problematic from the perspective of civil liberties. The broker provision, there's a lot that's been said about that, there was a lot of attention on that, but even more important from a civil liberties perspective, in my view, is section 6050I.

Section 6050I requires businesses that receive more than \$10,000 in cash in the course of conducting business to collect identity details of the person that's paying in cash, and submit a report to the government about that transaction. In some cases, failure to comply can be a felony and can carry prison time. Unfortunately, the Infrastructure Bill expanded that provision to include anyone who, in the course of conducting business, receives over \$10,000 in digital assets. That means that there are many participants in the cryptocurrency ecosystem, from developers to traders to miners to end users, that would be required to collect identity details of counterparties and report transactions to the government, or potentially create face criminal penalties. This really expands government surveillance of sensitive financial information, including for transactions under \$10,000, because of the way that blockchain technologies work, where if you actually learn the identity details associated with a particular wallet, you suddenly can see all transactions even if they're under \$10,000.

For me, it was something that really raised Fourth Amendment concerns, and it's something that also is going to have unintended consequences for certain blockchain technologies. You mentioned smart contracts, that's one of the most important use cases of cryptocurrency, this idea that you can write programs for your money. You could say, for every second of a song that I

play on my computer, automatically transfer one 1,000,000th of a cent to the songwriter or the singer. When you're having those types of smart contract transactions, this type of reporting requirement could really chill innovation in this space. So, from a civil liberties perspective, the thing I'm most concerned about is both the broker provision, but also especially 6050I.

Tim Lordan

Okay, great. What we're looking at over here is also the public interest technology aspects of what we're dealing with, not necessarily cryptocurrencies per se, but where this is all going, and how it affects the promise of more privacy, more security, etc.

There's one question from Marguerite in the Q&A, and this maybe helps us segue into the next topic of conversation for today. Marguerite asks, Is blockchain safe enough to use to distribute and manage public assistance and benefits? If so, can you provide info on an organization that is doing this? So, it's public assistance and benefits. I think this is like a GovTech solution idea. I know that in the past the administration had been looking into blockchain technology. I don't know if the Biden administration is starting that up again, if anybody knows the answer to that question, let Marguerite know.

Jacob Hampel

I don't know of a specific company that's working on things like that. From an intellectual standpoint, then yes, it is possible to use blockchain to do lots of verifications to make sure that anything that is of value was transferred at X time, and have a shared ledger, a shared record of all things like that. Over time, we'll see more and more of these systems online, with more commercial applicability, to have different uses, like the one that Marguerite outlined. As of right now, I think it's a little early in the development cycle for that to be a regular use of a lot of government services.

Tim Massad

Tim, if I can just respond to something that Marta said. She raised the concern on 6050I, as it exists even prior to the infrastructure bill, with requiring information when someone receives \$10,000 in cash, and now that's been expanded to \$10,000 in crypto. It's simply part of the framework that we have established to prevent illicit activity. Banks have to file suspicious activity reports. There's all kinds of measures, that we've developed over the years, to address the risk that cash is used for illegal activity, that financial institutions are used, unwittingly, as conduits for illegal activity, or illicit activity. That's what I'm saying -- that that regime needs to be extended to crypto in some way.

Some people in the crypto community will say, Well, yeah, we're fine with centralized institutions like Coinbase, or Kraken, or centralized exchanges, acting like brokers, because they are brokers. I think that gets the issue. We've turned the issue upside down. It's not a question of who's a broker so much, it should be a question of how do we ensure compliance in the world of crypto, with the basic architecture that we already have, to ensure Know Your Customer, anti-money laundering, combating financial terrorism, as well as general compliance with regulatory measures?

I'm fine with developing new ways to do that. Representative Foster, one of the chairs of the Blockchain Caucus, the other day in the crypto hearing, made a suggestion that that maybe there should just be a way that the government can identify the beneficial owner of a blockchain address, and so you don't have to have a whole complicated reporting scheme. Now, I doubt Marta would like that one, but there may be other ways that we can get there. It's just that we have to figure that out.

Tim Lordan

Tim, my policy area is more Internet policy over the past 25 years, but I do remember when the Know Your Customer legislation and regulations were introduced? Those were controversial at the time. It wasn't, Yeah, everybody agrees this is something we should do. There was a big debate about those issues, and, in the wake of 9/11 obviously, there was a national security imperative that maybe pushed that over the line. But, I see your point. I don't know. Marta, if you want to respond to him.

If I could jump to the next question. Asad Ramzanali, from Congressman Anna Eshoo, has a question that maybe will get us into a new aspect of the conversation. I think we want to finish with, Where does it all go from here? Maybe, at some point, we can talk about the the legislation on the Hill, the Treasury potentially rulemaking

But first off, Asad from Congressman Anna Eshoo's office, who is the co-chair of the Congressional Internet Caucus, asked: Now that the infrastructure legislation is enacted, does the IRS have the statutory deference to be able to deal with these issues without congressional action? Tim, I don't know if you can field that one, or Jacob, or Marta?

Tim Massad

I would say that they obviously have some leeway in developing the regulations as to how to interpret this. If they conclude that the language doesn't allow them what they think they need to get to a reasonable result, then it would be helpful for the IRS to come back to Congress and seek

that, but, presumably, there can even be some sort of public process involved around this where people can comment.

Tim Lordan

Yeah, deference has been in the news in the last 24 or 48 hours. I don't know if anybody has a different perspective on the deference that the IRS will be given by the courts?

Jacob Hampel

I can just say, from an industry perspective, we've been in discussions with Treasury, the IRS, and with Congress about what the way forward for this would be. I think the answer is there's going to be a little bit of both. There's certain things that Treasury can do on their own, that they do have the authority to address, but they might need some tweaks from Congress too, and we'll see that play out over the next 12 months.

Tim Lordan

Marta, where do you see this going as far as fixing maybe the problematic parts of of the legislation, and what things are coming down the pike in the next few months, and how do you feel about those?

Marta Belcher

Well, there are a couple of bills that have been introduced to potentially fix this, one is McHenry's bill, we also have another bill from Wyden and others, and one from Cruz. Some of the bills, like McHenry's bill, for example, actually do address 6050I, and others only address the broker provision. So, there is a lot of conversation to be had about addressing these provisions, and ideally addressing both of them not just one or the other, a lot of discussions to be had. It's great that the industry is having an opportunity to engage with this process, because, as you mentioned, Tim, this was sort of an addition to a must pass bill, and we didn't ultimately get any amendments in. So, being able to engage with this process, and hopefully amend it, would be useful.

Tim Lordan

Keying off of that. I'd say, as far as process goes, when it comes to legislation, I always view introduction of a bill as a starting point for a conversation. This really wasn't. I know we're in strange times, but, for Tim and for Jacob, how do you feel when we start regulating in this space, which is all very new -- I mean, we just mentioned about 10 different terms during this call that people probably need to go back and query to understand what they mean. Comment on the process?

Tim Massad

I think there was appropriate questioning about, Boy, now finally Congress is going to step in and regulate crypto, on this, and obviously this was driven by a desire to find a pay for the infrastructure measure, so that's what was really motivating it. That's sometimes how our legislation comes about. I would just say we need to try to tackle this more globally, or in a fulsome way, where we really think about what are the objectives we're trying to obtain.

To Jacob's point earlier, I agree there's probably better ways we can be doing anti-money laundering. There's probably a lot of stuff we're doing today, in traditional finance, that maybe isn't really worth it. We can look at that. Frankly, I think blockchain presents some exciting new possibilities in that regard, in terms of just digital identities that might make the KYC process a lot easier and faster and better. We should look at it that way rather than debating, Oh, a centralized crypto exchange maybe is a broker, but a DeFi protocol isn't, so therefore, we can't have tax compliance, or tax compliance at DeFi level is really up to the individual. That's not the right way to approach it in my mind. We've got to decide, Look, here are the objectives. How do we get there in a way that reasonably respects people's privacy, minimizes the regulatory burden, but still gets us the result that we need?

Tim Lordan

My question would be, how much do we think that policymakers on the Hill -- outside, of course, present company, Blockchain Caucus, Congressman Soto, and the Internet Caucus, like Congressman Anna Eshoo -- how well do we think they're prepared to legislate in this space, not only just looking at the financial aspects of cryptocurrencies, but the entire emerging ecosystem of decentralized technologies that Marta laid out?

Tim Massad

There's no question that it would be better to have a lot of this done through some sort of regulatory process, where you can have notice and comment, and have people really thinking about it clearly, than trying to do it through legislation. It should be more about broad principles, and providing authority and, really, some discretion to an administrative agency to develop the necessary requirements. Let's hope that it moves in that direction.

Tim Lordan

Marta, do you have a question? Do you have a response?

Marta Belcher

Well, I just wanted to add here, just zooming out a little more, because I think we haven't really covered this. Tim and I were going back and forth on KYC stuff. Just to make it super clear, there's plenty of KYC already in the cryptocurrency space. The on ramps and the off ramps, where people are buying and selling and depositing cryptocurrency, are heavily regulated, and are chartered banks, or are trust companies, or state licensed money transmitters, and they have minimum capital requirements, and they post bonds, and they open their doors to yearly examinations, and they're financial institutions under the Bank Secrecy Act, and they register with FinCEN, and they do KYC. All of that is to say, there's already quite a lot of regulation in the space, it's not like this is the first time.

Really the question, when we're thinking about the Infrastructure Bill, is where do we want to impose those reporting requirements? Which participants in the ecosystem do we want to put that on? The issue here, that I hope we can address, is on this question of whether that ends up falling on developers and traders and miners and end users and, frankly, the technology itself? That's really the angle that I'm looking at the Infrastructure Bill from.

Tim Massad

Marta, I would agree that on ramps and off ramps, centralized exchanges, clearly there's been a big push to do KYC at that level, and that's been very good. That's why I was distinguishing that from DeFi protocols, and all I'm saying is, you can't just say DeFi protocols are off limits because they're not operated by an entity. We've got to find a way to make sure that the same type of compliance occurs there, because, otherwise, I don't think the ecosystem will ultimately grow unless you do that. You obviously can have illicit activity taking place, the bigger the ecosystem gets, without it passing through one of those on ramps and off ramps where you might have a KYC check.

Tim Lordan

This is a complicated question for the panelists, and I probably would probably have to define three terms within this question, but Dimitri asks: Are any of you aware of progress made with regard to clarifying with the IRS, to start treating staking rewards as property rather than income, and making it taxed at the time of sale rather than time of when the staker gets ownership of these rewards?

Maybe we should start off by saying what is proof of stake versus proof of work? I don't know how to answer that, but I leave it to you, you guys are the experts.

Jacob Hampel

Sure, I can take the proof of stake versus proof of work. The way that Bitcoin works, for example, is through a proof of work consensus mechanism, where a bunch of computers, generally called miners, compete to validate transactions. In order to prove that they're a legitimate part of the system, they have to show their work, that's why it's called proof of work, that they show that they're actually participating in the way the network functions. Proof of stake works a little bit differently, I guess the best analogy to use is that it people bid for the rights to do the validation, and the way that you bid is that you put in a stake, you put in some of the tokens that you are talking about. The likelihood that you will be selected to do the validation, and then be rewarded for doing the validation, is proportional to the stake you put in, that's what's called staking. People can contribute tokens that they hold to be part of this process. There are some complex tax considerations for that, based on the dilutive effects of making additional tokens into these networks, what that means for whether something would be deemed a sale, while you're locking up your tokens as far as the staking process, and all sorts of other questions.

Unfortunately, I don't have a very clear answer to Dmitri's question. It is still very much being decided in the court, and at the regulatory level as well. That's one of a litany of issues that's going to have to be thought about, when we're thinking about these new systems. It's definitely exciting from a policy perspective to be a part of, because there's a new question every day about how things are going to fit into our regulatory system.

To Tim's point, I don't think that some of these things are impossible. It's going to require some creative thinking, and some optimizations, to make sure that things are working well, both for consumers and the government and for technology providers, that they can comply in an easy and straightforward manner.

Tim Lordan

Bill Rockwood from Congressman Soto's office just put in the chat, that the Congressman, along with Congressman Emmer, asked for clarification on that issue, and has put that link in the chat, so you can refer to that as well.

Lastly, when it comes to questions, I think we have a few more minutes, if you guys bear with me.

This question prefaces policy issues coming down the pike. Is the prospect of takedown of unlawful content, served from within the actual entries in the blockchain, various nodes, providers of useful practical access to actual nodes, such as Infura or Alchemy, a risk for the integrity of blockchain technology? Basically, what they're asking is, if they have to take down content on the

blockchain, does it risk the integrity of the blockchain? That's a content moderation, trust and safety question. Actually, the Trust and Safety Professional Association is planning an event on this in the coming months. Anybody have any perspective on taking content down for the blockchain, and whether that would, as required in a trust and safety scheme, cause the integrity of the blockchain to be compromised?

It's a tough one. Again, I think the Trust and Safety Professional Association, which are the people that actually do trust and safety in all the different companies, are looking at how do you do trust and safety on the decentralized web, and they're planning that for a couple of months from now, so maybe we should just wait for that event.

Marta Belcher

Yeah, I can add. There's a difference between content that's actually on a blockchain, which is immutable, and then content that maybe interacts with blockchain technology, but is not actually on the blockchain. That's an important distinction, because the actual transactions on the ledger cannot be changed after the fact because they're immutable. Often when you have blockchain technology interacting, the data itself is not actually on the blockchain. In that instance, you can do content moderation in different ways. One of the ways you can do content moderation, of course, is this centralized model that we're used to, but another way you can do it is actually to have content moderation tools that are decentralized, where content moderation is done on a node by node level. There's a company called Murmuration Labs that is working on this, that basically builds content moderation tools for the decentralized web, with the idea being that each node can make content moderation decisions and subscribe to, effectively, blocklists that enable you to, on a node by node level, do content moderation. So, totally, actually not only plausible but possible to do content moderation on the decentralized web in a decentralized way, and the fact that blockchain technology is immutable doesn't mean that the content that interacts with it always is.

Tim Lordan

I guess, the point being that these things are all new, the questions are really new, the challenges are real, but nothing is potentially impossible when it comes to building trust and safety into the decentralized web, doing appropriate reporting requirements as Tim suggests, and maybe we should leave it there, with just a lot of challenges, a lot of work to do, but nothing's impossible.

Let me just also say that this this event was simulcast by the Internet Society, and we always appreciate that when they broadcast our events to the worldwide audience for the Internet Society. I want to again thank the Blockchain Caucus and the Congressional Internet Caucus, their co-chairs, and Bill Rockwood for doing the introduction. Most importantly, I want to thank the

experts who have come and lent their advice to this particular discussion series. Jacob, Tim, and Marta, I really appreciate it, and I hope we can have you back, because I think it's going to be a lot more issues coming down the pike.

Tim Massad

Thank you for having us.

Jacob Hampel

Absolutely.

Tim Lordan

Thanks, everybody and look forward to the next Tech Policy Recess coming in February. Thanks, everybody. Thanks, Bill.