Comments to the Conference of State Bank Supervisors on the Draft Model State Regulatory Framework for Virtual Currency

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Introduction

On December 16, 2014, the Conference of State Bank Supervisors (“the Conference”) issued for public comment a draft model state regulatory framework for virtual currency activities. We congratulate the Conference and the Emerging Payments Task Force for the forward thinking they have demonstrated by seeking to develop clear and consistent guidelines for this nascent industry.

Coin Center is a non-profit research and advocacy center focused on the public policy issues facing cryptocurrency technologies such as Bitcoin. Our mission is to build a better understanding of these technologies and to promote a regulatory climate that preserves the freedom to innovate using blockchain technologies. We do this by producing and publishing policy research from respected academics and experts, educating policymakers and the media about blockchain technology, and by engaging in advocacy for sound public policy. In that spirit, please find below our comments on the proposed framework.

Please do not hesitate to get in touch if you have any questions or if we can assist you in any way.
I. The Conference has Rightly Chosen to Promote Consistency for Virtual Currency Regulation Across the Several States

The Conference has offered a Policy on State Virtual Currency Regulation (“the Policy”) that rightly recognizes “the public interest in allowing [virtual currency] technologies to develop in a purposeful manner, providing *clarity and certainty* for implementation.”¹ The following subsection will show how inconsistent state laws presently erode clarity and certainty in the law, and the collateral consequences that such uncertain law has on innovators in the virtual currency space.

Subsequent sections will recommend how clarity and certainty may be best brought about by the efforts of the Conference. Our recommendations are discussed in detail below but, in brief, they are as follows:

1. The Conference should encourage states to adopt *sui generis* regulations based on its Draft Model Regulatory Framework (“the Model Framework”),² rather than through reinterpretation of existing state money transmission regulations.³
2. The Conference should limit its definition of “covered activities” to “transmission” and “exchange” of virtual currency, eliminating “facilitation” from the definition,⁴ and it should incorporate this definition into the Model Framework.
3. The Conference should adopt an on-ramp for startups, shielding fledgling innovators from the costs of licensure. This approach should be pursued in the alternative to permitting greater flexibility for Commissioners to set licensee requirements.⁵
4. The Conference should encourage licensing reciprocity between states that adopt its model framework.
5. The Conference should alter language in the Model Framework that mandates the recording of identifying information for all “parties” to transactions. It should, instead, mirror the recordkeeping requirements mandated by the U.S. Treasury and found in the recent BitLicense draft from the New York Department of Financial Services.⁶

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³ See infra pp. 3-5.
⁴ See infra pp. 9-12.
⁵ See infra pp. 12-14.
⁶ See infra pp. 14-17.
a. Existing Regimes are Inconsistent

Only New York has yet decided to treat virtual currency business activity under a separate regulatory regime from traditional money transfer. Texas and Kansas have offered guidance indicating that third-party bitcoin exchanges do engage in money transmission and must be licensed as money transmitters with state authorities. California is studying its options. Most states remain silent, leaving the interpretation of existing state money transmission regulations up to the virtual currency entrepreneurs who may or may not need to apply for license.

To achieve conformity and preserve innovation, all states should be encouraged to regulate virtual currency business activity under a *sui generis*, light touch regime. As presently drafted, the Policy remains agnostic as to whether states should affect virtual currency regulation through *sui generis* regulation or with existing money transmission law:

States can apply activities-based regulations to virtual currency service providers through various means, including with laws and/or regulations written explicitly for virtual currency activities, or by interpreting or amending existing laws and regulations – for example, banking or other financial services laws – to include virtual currency in existing licensing schemes.

As the following sections will show, existing laws are dangerously unclear and fail to provide innovators with certain and uniform statements of their obligations. Confusion exists even at the most fundamental level of the law: whether or not certain activities qualify as money transmission and therefore require licensure. While we applaud the Conference for

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11 Marco Santori, Bitcoin Law: Money transmission on the state level in the US, CoinDesk (Sep. 2013) available at http://www.coindesk.com/bitcoin-law-money-transmission-state-level-us/ (explaining that entrepreneurs have two strategies: (1) have an attorney analyze money transmission statutes from all states, and make a subjective call as to whether or not licensing will be needed in each state or (2) write letters to each state Commissioner seeking a request for rulling and a no action letter).
12 CSBS Policy on State Virtual Currency Regulation, supra note 1, at 5.
13 See generally Kevin V. Tu, Regulating the New Cashless World 65 Ala. L. Rev. 77 (2013) available at http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2235937 (*In the absence of clear guidance, a number of services that accept customer payments on behalf of merchants in connection with the sale of the merchant’s goods and services have struggled with the question of whether their unique business models are subject to regulation. . . . While established companies can afford to comply, the licensing and
recognizing the need for consistency, we strongly urge the Conference to set a clear
definition of covered virtual currency activities, include that definition in the Model
Regulatory Framework14 (rather than in the policy statement as it currently exists15), and
strongly encourage states to regulate virtual currency using some codified version of the
model framework rather than engaging in haphazard reinterpretation of existing laws.

Across the states, both money transmission regulations and early drafts of virtual currency
regulations are dangerously broad and inconsistent in their scope of applicability.16
Transmission is defined in a catch-all approach that chooses to exempt specific players. The
result is a legal regime that turns on its head the fundamental basis for anglo-saxon law:
“Everything which is not forbidden is allowed.”17 By creating a sweeping definition of money
transmission the States effectively criminalize a broad swath of behaviors, should their
practitioners engage in them without first seeking license: moving money as a bicycle
messenger,18 moving money as a parcel delivery service (e.g. FedEx),19 moving money
between buyers and sellers on online marketplaces (e.g. Amazon or AirBnB),20 storing
payment credentials on a mobile device (e.g. Google Wallet or Apple Pay),21 and, of course,
moving value using virtual currency.22

The dangerous scope of these definitions is usually tempered, state-by-state, with specific
excisions: Federal and state governments are often exempted,23 parties moving money on
behalf of governments are often exempted,24 the US postal service is often exempted.25

regulatory compliance costs exist as a barrier to entry for payment start ups and may stifle continued
innovation if left unsettled.”).

14 DRAFT MODEL REGULATORY FRAMEWORK, supra note 2.
15 CSBS POLICY ON STATE VIRTUAL CURRENCY REGULATION, supra note 1, at 2.
16 See generally Tu, supra note 13, at pp. 87-92 (“The state specific nature of money transmitter statutes
makes generalization difficult.”)
17 Lord Gordon Slynn of Hadley, Mads Tønnesson Anderæs, Duncan Fairgrieve, JUDICIAL REVIEW IN
INTERNATIONAL PERSPECTIVE 256 (2000) (“If the first principle is denied, the citizen’s freedoms are fatally
curtailed. He cannot go about his daily business without fear of peremptory interference.”), See also
Thomas Hobbes, Leviathan 252 (A. R. Waller ed. 1904) (“[T]he use of laws is . . . as hedges are set, not to
stop travellers, but to keep them in the way. ... Unnecessary laws are not good laws, but traps for money.”).
18 See Tu, supra note 13, at 99 (“[M]oney transmitter laws potentially encompass everything from bike
messengers delivering a check to any number of Internet and mobile payment services that take payment
information from a buyer and deliver payment to the merchant seller.”).
19 Id.
20 Id.
21 Id.
22 See Santori, supra note 11.
23 See Tu, supra note 13, at 89 (“State money transmitter statutes often exempt ‘money transmission’ when
conducted by certain categories of persons. The most common exemptions are for: (1) the federal and state
government. (2) those making transfers on behalf of the government or in connection with government
benefits;67 (3) regulated banks and financial institutions; (4) authorized agents or delegates of a licensed
money transmitter; and (5) the United States Postal Service. As such, only a lucky few—usually the
government and those operating in heavily regulated industries—will be able to take advantage of an
exemption.”).
24 Id.
25 Id.
However, these exemptions are both minor (e.g. most states do not, for example, exempt private parcel delivery services as they do the US postal service\textsuperscript{26}), as well as inconsistent as between the states.\textsuperscript{27} As a result, it is far more likely that a business handling money is in violation of some law in some state, than it is protected by some exemption.\textsuperscript{28} Everything which is not allowed is forbidden.

As discussed above, the scope of the problem is large, and we are, therefore, very grateful that the Conference has chosen to work toward “consistent regulatory approaches among states.”\textsuperscript{29} We appaud this goal and submit this comment in the hopes that such consistency may be achieved. In the following subsections, we highlight the dangers of inconsistency in order to underscore the great need for the Conference to more strongly encourage uniformity. Later, we analyze the proposed definition of “covered activities”\textsuperscript{30} and we address the need for regulatory “flexibility.”\textsuperscript{31} Finally, we analyze the substance of the model regulations and propose a specific modification, having to do with recordkeeping.\textsuperscript{32}

b. Inconsistency Generates Real Costs for Innovators

At least one state, California, demands a non-refundable $5,000 fee merely to submit an application\textsuperscript{33} in order to determine whether one’s putative money transmission business either (a) will be licensed, (b) will not be licensed and therefore will be prohibited from operating in the state, or (c) does not need to be licensed in order to operate. Applications can take time to prepare, measured both in costly attorney-hours, and delays in product launches, and different states may process applications at differing speeds. One prominent lawyer working in the field estimate the costs of merely seeking licenses across the states at “well into six figures.”\textsuperscript{34} This sum may be tolerable for a large and well-capitalized business, but it is likely to sink a small start-up or chill investment in the company’s vision.

As a result, a virtual currency firm seeking full compliance will need to pay a range of application fees for nearly every state, create nearly 50 uniquely tailored applications, differentiate between their online customers by state, and refrain from transacting with customers residing in states where the firm is not yet licensed.\textsuperscript{35} All of this must occur before

\textsuperscript{26} Id.
\textsuperscript{27} Id.
\textsuperscript{28} Id.
\textsuperscript{29} CSBS P\textit{olicy on State Virtual Currency Regulation}, \textit{supra} note 1, at 2.
\textsuperscript{30} See \textit{infra} pp. 9-12.
\textsuperscript{31} See \textit{infra} pp. 12-14.
\textsuperscript{32} See \textit{infra} pp. 14-17.
\textsuperscript{33} California Department of Business Oversight, \textit{Division 1.2. Money Transmission Act}, available at http://www.dbo.ca.gov/Licensees/money_transmitters/ (last accessed Feb. 2015) (“Completed applications for new money transmitter license, along with the non-refundable fee of five thousand dollars ($5,000) made out to the Department of Business Oversight, should be addressed to. . . .”).
\textsuperscript{34} See Santori, \textit{supra} note 11.
\textsuperscript{35} Software engineers can design websites that block all incoming visitors from certain geographic locations. This is achieved by filtering traffic based on the visitor’s IP address, a number that is broadcast by all networked computers and mobile devices. Lists exist that indicate which IP addresses originate from which
the company even needs to actually comply with any substantive regulatory obligations placed upon licensees.

Even worse, a firm could engage in this costly process only to discover that it need not be licensed in a given state, or any state, because it does not, according to the flexible definition or the discretion and interpretation of a state regulator, engage in a covered activity. The firm that takes this costly process on its books only to be deemed exempt will suffer in a competitive market while identical firms profit from that knowledge at the applying firm’s expense and delay.\textsuperscript{36} Meanwhile, firms that choose not to apply, believing perhaps erroneously that they would be exempted, risk harsh penalties, both civil and criminal, should regulators decide to hold them to account for activities that were not previously understood as covered.\textsuperscript{37}

\textbf{c. Inconsistency is Counter the Rule of Law}

Criminal and civil penalties for the unlicensed operation of a money transmission business vary from state to state but also invoke federal punishment under the Bank Secrecy Act.\textsuperscript{38} Should an online virtual currency business be found transacting with just one customer in one state wherein they have not obtained a license, any individual who “knowingly conducts, controls, manages, supervises, directs, or owns all or part” of that company can be fined and imprisoned for up to five years.\textsuperscript{39} These extreme punishments can await individuals engaging in behavior that had been widely considered outside the scope of money transmission laws within a community of innovators or even amongst lawyers and regulators within the individual’s home state. These punishments can also await nearly any employee or investor in a business that had diligently sought and obtained licenses in several though not all states before commencing operations.

The inconsistent and seemingly arbitrary application of such harsh penalties violates the fundamental human dignity of innovators. Legal philosophy and the Rule of Law counsels that citizens of a state should be treated as beings capable of voluntarily modulating their behavior so as to avoid illegality and punishment.\textsuperscript{40} There should, it is often said, be no

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\item regions. For example, a list has been made of all IP addresses in and near Nigeria, in an overbroad effort to stop spam and scam emails, which frequently originate from users in that country. See Wizcrafts Computer Services, \textit{Block Nigerian Scammers From Apache Based Servers or Forums with a .htaccess Blocklist}, http://www.wizcrafts.net/nigerian-blocklist.html (last accessed Oct. 16, 2014).
\item See Tu, supra note 13, at 111.
\item Id.
\item 18 U.S.C. §1960(a).
\item Jeremy Waldron, \textit{How Law Protects Dignity}, Public Law & Legal Theory Research Paper Series Working Paper No. 11-83, (Dec 2011) (“I do not mean to deny the ultimately coercive character of law . . . . But even in criminal cases, where the coercive element is front and center, it is often the case that a date is set for a convict to report to prison of his own volition. Of course if he does not turn up, he will be hunted down and seized. Still, the law strains as far as possible to look for ways of enabling voluntary application of its general norms and many of its particular decrees.”).
\end{itemize}
punishment without certain, ex ante law. When time in prison awaits a Florida resident merely because she engaged in an activity that, loosely construed, might have required licensure in Oregon, the rule of law is unclear and the dignity of citizens is in jeopardy.

d. Unabated Inconsistency will Make Federal Preemption of State Law More Desirable

This problem of inconsistency has been magnified by the emergence of the Internet as a global rather than local medium for communication and value exchange. The inefficiency and indignity of subjecting American citizens who provide services on the global Internet to a host of inconsistent and sometimes severely-punished local state laws has already been remedied in the context of defamation, criminal, and copyright law by use of Federal preemption.42

The Communications Decency Act insulates an online service provider from vicarious liability for any violations of state civil and criminal law committed by her users. If a Facebook user slanders a business, Facebook cannot be sued under state law.43 If a Craigslist user advertises sexual services, Craigslist need only worry about complying with Federal anti-trafficking laws rather than a host of variable state-level laws relating to sex workers and advertisement.44 If a Twitter user reposts copyrighted content, Twitter need only worry about compliance with the federal Digital Millenium Copyright Act, rather than defending themselves from a host of state-level lawsuits.45

Should money transmission regulation across the states fail to become consistent, both in scope of application and substantive requirements, similar preemption of state law by new federal legislation would become highly desirable for companies transacting online. Federal Law already has an improved test for scope and applicability of money transmission regulations. The Bank Secrecy Act defines a transmitter as any “person who engages as a

41 Often referred to with use of the latin maxim: Nullum crimen, nulla poena sine praevia lege poenali, or "[There exists] no crime [and] no punishment without a pre-existing penal law [appertaining]."
42 See 47 U.S.C. § 230. See also Electronic Frontier Foundation, CDA 230 The Most Important Law Protecting Internet Speech, https://www.eff.org/issues/cda230 (last accessed Feb 2015) ("This legal and policy framework has allowed for YouTube and Vimeo users to upload their own videos, Amazon and Yelp to offer countless user reviews, craigslist to host classified ads, and Facebook and Twitter to offer social networking to hundreds of millions of Internet users. Given the sheer size of user-generated websites (for example, Facebook alone has more than 1 billion users, and YouTube users upload 100 hours of video every minute), it would be infeasible for online intermediaries to prevent objectionable content from cropping up on their site. Rather than face potential liability for their users’ actions, most would likely not host any user content at all or would need to protect themselves by being actively engaged in censoring what we say, what we see, and what we do online. In short, CDA 230 is perhaps the most influential law to protect the kind of innovation that has allowed the Internet to thrive since 1996.").
43 Id.
44 Id.
45 Id.
business in the transmission of funds, but the Financial Crimes Enforcement Network’s (FinCEN’s) implementing regulations subsequently exclude a broad class of individuals, anyone who:

(A) Provides the delivery, communication, or network access services used by a money transmitter to support money transmission services;

(B) Acts as a payment processor to facilitate the purchase of, or payment of a bill for, a good or service through a clearance and settlement system by agreement with the creditor or seller;

(C) Operates a clearance and settlement system or otherwise acts as an intermediary solely between BSA regulated institutions.

(E) Provides prepaid access; or

(F) Accepts and transmits funds only integral to the sale of goods or the provision of services, other than money transmission services, by the person who is accepting and transmitting the funds.

These carve-outs are explicit and clearly insulate a number of parties involved in online commercial activities from liability. By and large, state money transmission regulation lacks such explicit carve outs. As one commentator has suggested:

“FinCEN’s implementing regulations show an understanding of the potential for money transmitter laws to implicate a host of electronic payment and delivery mechanisms.”

States appear either unconcerned or incapable of dealing with these implications. This obstinence underscores the important role that the Conference can play in improving the regulatory climate for online innovation at least as far as virtual currencies are concerned.

II. The Conference’s Proposal Does not Clearly Specify Who must Obtain a License

As described in the previous section, the primary concern with legal consistency is the applicability, rather than the substance, of a licensing regime. To that end, it is imperative that any model regulations clearly and appropriately define covered activities, as well as how

48 31 C.F.R. § 1010.100(ff)(5)(ii)
49 See Tu, supra note 13, at 96.
50 Id.
and when small or low-risk service providers may be accommodated with, what the Conference rightly calls, regulatory “flexibility.”

a. “Covered Activities”

We applaud the Conference for clearly specifying that “covered activities” should only include actions taken on “behalf of another.” As the Conference says, “Such financial transactions or services place the activity provider in a position of trust. This position of trust is the basis for most financial services laws and regulations, and should be applied regardless of the medium of value.” We agree that the assumption of consumer trust is the key to determining whether an activity should or should not be covered by a licensing regime.

We believe that the Conference should, therefore, remove the final bullet from “Covered Activities:”

Services that facilitate the third-party exchange, storage, and/or transmission of virtual currency (e.g. wallets, vaults, kiosks, merchant-acquirers, and payment processors).

“Facilitation” carries with it an extensive range of possible interpretations. Take for example, virtual currencies that exist in public ledgers, called blockchains, and are transferred by means of a network protocol (i.e. a set computer language used by computers connected to the Internet in order to accomplish some collaborative work). For these virtual currencies, referred to as cryptocurrencies, it would be incorrect to suggest that Internet service providers, such as Time Warner or Comcast, do not facilitate the third party exchange. Indeed there is no way to exchange cryptocurrency if one cannot connect to the Internet. However, it seems unreasonable to ask these infrastructure providers to register as virtual currency businesses. While it is true that these companies move packets of data that effectuate a transfer of consumer funds, they are not in a trusted position and therefore there is no “basis,” as the Conference puts it, to subject these companies to financial services laws and regulations.

A Time Warner or a Comcast are not in a position of trust as they move Bitcoin balances at the behest of customers or third party exchangers because of the nature of the packets that the Bitcoin network sends over the Internet.

Bitcoins are not files on a computer, such as MP3 music files or Microsoft Word documents. Bitcoins cannot be sent as one would send an email with an attached document. Instead, Bitcoins are chains of digital signatures that are recorded in a public ledger. This ledger describes all Bitcoin transactions over the entire history of the Bitcoin network. When someone sends Bitcoins she is, in fact, asking the network to verify a new digital signature.

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51 Draft Model Regulatory Framework, supra note 2, at 6.
52 CSBS Policy on State Virtual Currency Regulation, supra note 1, at 2.
53 Id.
54 Id.
This signature is something that only the holder of a private key (think of it like a password) matched to a pseudonymous public address (think of it like an bank account number or username) could create and transmit to the network. If the signature looks valid, the peer-to-peer network will add the signed transaction to the public ledger and bitcoin balances reflected on that ledger will change.

The technical specifics are beyond the scope of this short comment, however, it is not inaccurate to say that Time Warner or any other Internet service provider cannot be in a position of trust in these transactions. All these intermediaries can do is deliver a Bitcoin user’s digital signature throughout the peer-to-peer network, they cannot forge that signature or change the signature to transfer funds elsewhere. We do not need to trust Internet service providers because they are incapable, thanks to industry standard cryptography, of stealing or otherwise mishandling customer balances.

The only way that an entity may be truly in a position of trust with regard to a consumer’s Bitcoins is if it has the necessary private key (think of it like a password) to create a cryptographic digital signature on behalf of the customer. For example, an individual may have some bitcoins in an address to which only she has the private key. She may wish to move those funds to a currency exchanger (e.g. the Bitcoin exchange BitStamp) in order to convert to dollars, or, alternatively, she may want to move those bitcoins to a company that will store and secure consumer funds with advanced infrastructure (e.g. Coinbase or Xapo). In order to use these services, our consumer will send her bitcoins to a Bitcoin address that the company controls. The company controls this address because only it has the private key that can sign transactions on the network for said address. Thus a company that has the private keys that control its customer funds is the only entity on the network that actually is in a position of trust and it is these entities that should be regulated under state financial services law.

The same logic should apply to companies that facilitate bitcoin usage but are not entrusted with the keys that can actually move consumer bitcoins. Some bitcoin companies will build and maintain wallet software to enable users to secure their own bitcoins. So long as the company does not have knowledge of the private keys that consumers store in these wallets, however, they are not in a position of trust. If the wallet provider was deemed to be engaging in “covered activity” because it facilitated the storage of consumer bitcoin when it gave the consumer software, then it would be impossible to avoid reaching the same conclusion as regards the manufacturers of the computer’s software operating system (e.g. Microsoft Windows, or Google Android), or, for that matter, the computer’s hardware (e.g. Apple, or Samsung).

Similarly, Bitcoins can be placed in addresses that have several linked private keys. This is called a multi-sig (as in multiple signature) wallet or a multi-sig transaction. Many startups, such as BitGo and Hedgy, use multiple signatures to offer consumer services, and yet these companies do not hold sufficient keys to any user account to unilaterally transfer customer funds. The customer can initiate the transfer and the company can add their key to complete
it, but they cannot, without customer involvement, write transactions. Without the trust that comes with actually having the ability to move customer funds, these entities too should not be regulated as money transmitters. The *sin qua non* of bitcoin ownership and therefore of trust and regulation for a covered entity must be possession of the keys or other code necessary to unilaterally effectuate a transfer of customer funds.

The Conference’s definition of “covered activities” covers these key-holding activities under “Transmission” and “Exchange.” Therefore we recommend simply removing the final segment on facilitation so as to restrict regulation to those entities truly in a position of trust. Additionally we believe the Conference should explicitly state that

*Entities who provide infrastructure for virtual currency transactions, but cannot unilaterally effectuate a transfer of customer funds, shall not be deemed to be engaging in covered activities.*

Additionally we’d argue that such a change brings the Conference’s proposal into better alignment with Federal standards under the Bank Secrecy Act (BSA), thereby fostering a consistent regulatory environment, as is the Conference’s stated goal. FinCEN’s implementing regulations clearly exempt from licensure anyone who merely “Provides the delivery, communication, or network access services used by a money transmitter to support money transmission services[.]”\(^{55}\)

**b. Merchant Acquirers and Payment Processors**

We note that under the Conference’s given examples of facilitation both “merchant acquirers” and “payment processors” are listed.\(^{56}\) In the context of virtual currencies it is true that these entities may, in fact, hold consumer keys as funds are exchanged into dollars and provided to merchant seller’s bank account. The Conference rightly asks, in number 17 of its questions for public comment, whether merchant acquirers (and we assume the Conference means payment processors as well) warrant special treatment in the context of virtual currencies. These entities are, as the Conference explains, historically exempt from money services businesses statutes. A virtual currency merchant acquirer or payment processor should similarly be exempt.

In the context of Bitcoin, for example, a merchant acquirer poses *fewer* consumer risks than traditional merchant acquirers. Traditional credit and debit card processors hold sensitive consumer information, including names, addresses, credit card numbers, and pin numbers. Bitcoin payment processors never hold this type of information. They hold only the bitcoins transmitted by the consumer, and therefore cannot use consumer information to generate further, fraudulent transactions, or lose such information to criminals who would steal it.\(^{57}\)

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\(^{55}\) 31 C.F.R. § 1010.100(ff)(5)(ii)(A).

\(^{56}\) CSBS *Policy on State Virtual Currency Regulation*, *supra* note 1, at 2.

Traditional processors are often exempted because, as the Conference remarks, “of their nexus to the highly regulated banking system.”\textsuperscript{58} A virtual currency merchant acquirer that offers to settle merchant accounts in dollars with the merchant’s bank account would, presumably, share a similar nexus.\textsuperscript{59} Therefore, we believe that historical exemptions for such entities should carry over into the virtual currency space. To make that exemption clear we recommend the conference mirror language from FinCEN as follows:

\begin{quote}
Entities who act as a payment processor to facilitate the purchase of, or payment of a bill for, a good or service through a clearance and settlement system by agreement with the creditor or seller shall not be deemed to be engaging in covered activities.\textsuperscript{60}
\end{quote}

Should the Conference find these explicit exemptions too strongly worded or explicit, we believe that simply removing the bullet-point on facilitation\textsuperscript{61} from the section on covered activities will accomplish much the same, if less clearly.

c. "Flexibility"

The Conference rightly seeks “to accommodate different activity levels and business models and to avoid inhibiting innovation.”\textsuperscript{62} Virtual currency is exciting, in part, because it has brought new life and competition to markets for the provision of financial services. This vibrancy is not the result of careful scientific research or newly patented inventions developed by large technology firms. It is, instead, the result of several small companies, start-ups, working with freely available software and an open network.\textsuperscript{63}

These small firms are diverse, presenting consumers with many new options for financial transactions, but also capable of scaling massively should their ideas gain widespread consumer traction. That diversity is contingent on low overhead costs inherent to virtual currency networks, which allows a company to securely accept funds from a customer across

\begin{footnotesize}
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\item \textsuperscript{58} Draft Model Regulatory Framework, supra note 2, at 7.
\item \textsuperscript{59} See BitPay, What are my options for settlement?
https://support.bitpay.com/hc/en-us/articles/201890513-What-are-my-options-for-settlement- (last accessed Feb. 2015) (“Instant settlement via bank deposit is included in all BitPay plans. Plans are billed once monthly, then you get exactly what you charge. Settlement begins instantly, so you never need to hold bitcoin when accepting payments.”).
\item \textsuperscript{60} Cf. 31 C.F.R. § 1010.100(ff)(5)(ii)(B) (“Acts as a payment processor to facilitate the purchase of, or payment of a bill for, a good or service through a clearance and settlement system by agreement with the creditor or seller.”).
\item \textsuperscript{61} CSBS Policy on State Virtual Currency Regulation, supra note 1, at 2.
\item \textsuperscript{62} Draft Model Regulatory Framework, supra note 2, at 6.
\item \textsuperscript{63} Angel.co, a valued trade publication within the technology investment community, lists some 619 companies that are now building Bitcoin related businesses. These companies, however, are small. Average valuation is estimated at $3.9 million. Angel.co, Bitcoin Startups, https://angel.co/bitcoin (last accessed Feb. 2015).
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the world in a matter of minutes for fractions of a penny on the dollar.\textsuperscript{64} That network also enables scalability, transactions of many millions of dollars carry the same fees as transfers of pocket change and can be affected just as easily.\textsuperscript{65} As technological limits on diversity and scalability are lifted, it is important that those limits are not merely reinstated by a costly regulatory structure that is insensitive to the small size or rapid growth of new and innovative players.

The Conference has, as it says, “stressed regulatory flexibility” in order to protect these innovative players. We note that a caveat along the lines of “with flexibility for Commissioners to set requirements” has been added to various specific regulatory requirements placed on licensees, specifically the proposed capital requirements,\textsuperscript{66} surety bonding,\textsuperscript{67} cyber-audit compliance,\textsuperscript{68} and audited financial statements.\textsuperscript{69}

While we agree with the motivation behind this approach, we do not think granting state banking Commissioners discretion to set certain requirements is the best choice to encourage innovation. Indeed, such discretion may exacerbate the consistency problem discussed in the previous section. To feel free to innovate and try new ideas, an entrepreneur needs regulatory certainty. Without that certainty she will have difficulty convincing investors that she will be able to meet her regulatory obligations and cover regulatory costs. By empowering each state Commissioner with “flexibility” to determine requirements, the problem of unpredictability and state-by-state inconsistency would only become more pronounced. Even if an entrepreneur was able to assemble a complete list of requirements in each State, she would be unable to quantify flexible requirements, dependent, as they are, on the inherently human variability of some 48 Commissioners.

Additionally, as was discussed in the first section, it is uncertainty as to whether licensure is required, rather than the particular costs of complying once licensed, that most powerfully chills innovation in the sector.

Accordingly, we strongly urge the Conference to adopt an on ramp for startups in the virtual currency space. Companies that are very new and pose little threat to consumers could be exempted from licensure. For example, the Conference could exempt firms that deal in less than $5 million annually, so long as long as they register with federal money laundering authorities and clearly disclose their unlicensed status to consumers. Firms with pending applications could also be offered a safe harbor allowing them to operate while their license applications are pending; these transitional firms should similarly be licensed with federal

\textsuperscript{64} Popular hosted wallet provider Coinbase, for example, pays the Bitcoin network typically 0.0002 BTC for transactions of any size. They do not charge this fee to the customer choosing to bear these small costs internally. Coinbase, Does Coinbase pay bitcoin miner fees? (Dec 2014) available at https://support.coinbase.com/customer/portal/articles/815435-does-coinbase-pay-bitcoin-miner-fees-

\textsuperscript{65} Id.

\textsuperscript{66} DRAFT MODEL REGULATORY FRAMEWORK, supra note 2, at 2.

\textsuperscript{67} Id.

\textsuperscript{68} Id. at 3.

\textsuperscript{69} Id.
authorities, make clear disclosures, and if transacting greater than $5 million annually they can be required to post a standard bond pegged to the volume of business that they do.

If such an on-ramp proposal was codified by the states it would vastly decrease the costs inherent in a federated regulatory regime. A small and innovative startup with little to spend on compliance and outside council could legally operate in every state, merely by registering with the federal authorities, reporting their transaction volume to the various state authorities, and making disclosures to their customers. A firm that grows rapidly, passing $5 million in annual transactions, would by contrast have sufficient resources to comply with a more varied and uncertain state licensing landscape. In total, innovative start-ups would be protected and the argument for federal preemption of inefficient state laws would be significantly weakened.

d. Reciprocity

Should the Conference remain concerned over the possibility of federal preemption, one key means to decreasing the frictions inherent in a federated licensing regime is reciprocity between the states. The Conference, should it wish, can strongly suggest that any state adopting the model framework permit companies licensed using the framework in other states to operate without re-licensing. The company could be made to register and prove their foreign licensure, but no further burdens would be demanded of them. This would significantly decrease any inefficiencies inherent to applying state licensing laws to a global platform for commerce and avoid a repeat of the federal preemption that came to dominate other law and regulation on the Internet.  

III. With one Exception, the Conference's Proposal Creates Reasonable Obligations for Licensees

The Conference’s Model Framework shows great care in offering guidelines for state licensing requirements and conditions. We take issue only with one sub-section, 7(f), which prescribes the minimum transaction-level data that a covered entity must record and maintain for record keeping and auditing purposes. The section specifies that the following information is to be recorded:

i. Names, addresses, and IP addresses of parties to transaction

ii. Identifiable information of virtual currency owner

iii. Transaction confirmation

iv. For foreign transactions, country of destination

70 See infra pp. 7-8.
71 DRAFT MODEL REGULATORY FRAMEWORK, supra note 2, at 3.
First, there is no per-transaction IP addresses data that can be recorded for many virtual currency transactions, such as those taking place on the Bitcoin network. While it is true that a user will connect to the Bitcoin network using a computer, and that connection will be established by way of an IP address, the user will issue her transaction request to nearby peers on the network. These peers will, in turn, relay her request throughout the network to other peers who will do the same until both (a) the message is recorded in the public ledger by a miner and (b) the recipient has received a transaction message. If the transaction has taken many hops through the network it may be effectively impossible to determine the originating IP address being as this information does not travel with the transaction request. An individual, who sends bitcoins to the wallet that a customer has set up on Coinbase or some other hosted wallet provider, does not broadcast her IP address. By the time Coinbase receives the transaction message through the peer-to-peer network, it will generally be unable to determine from where that message originated.

Second, 7(f.)i. requires that licensees record information related to the “parties to the transaction.” The licensee will always be able to record personally identifying information related to its own customer, and must do so in order to comply with federal money laundering law. The licensee will not, however, always be able to record the personally identifying information of individuals who send their customers funds or to whom their customer sends funds.

Many virtual currencies, including Bitcoin, move across open networks. Users can be sent and can send Bitcoins to and from their public addresses on this network, which are random but unique strings of characters that correspond to balances on a public ledger and private keys held by users. These addresses are the only identifying data that automatically travel with transaction requests through the network.

Accordingly, a licensee’s customer can and often will send Bitcoins to, or receive Bitcoins from, an account that shares no further information about its identity than the public address. The licensee has no legal or technological means to identify addresses belonging to individuals who are not its own customers. If licensees were held liable for such recordkeeping, it is unclear how such an obligation would be met and at what cost. The only possible solutions would require vast online repositories that match Bitcoin addresses to real world identities. It is unclear who would create and maintain these databases and how the financial privacy of those recorded therein would be safeguarded.

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73 Id.
75 See Ludwin supra note 72.
76 parties to the transaction
Mandating identification of these non-customers would also go beyond existing recording requirements for money services businesses as found in FinCEN’s regulations\textsuperscript{78} under the BSA,\textsuperscript{79} the so-called “Travel Rule”:

‘Before concluding any transaction with respect to which a report is required . . . a financial institution shall verify and record the name and address of the individual presenting a transaction, as well as record the identity, account number, and the social security or taxpayer identification number, if any, of any person or entity on whose behalf such transaction is to be effected.’\textsuperscript{80}

FinCEN’s public guidance explicitly indicates that information about non-customers must only be recorded “if received,”\textsuperscript{81} and the Federal Financial Institutions Examination Council’s online manual specifies that only “[a]s many of the following [non-customer-related] items as are received with the payment order”\textsuperscript{82} need be recorded. This limitation excuses financial institutions from the costly requirement of tracking down personal details for individuals who are not their own customers whenever those details are not already present in the transaction. We recognize that the purposes of state licensing may not be coterminous with FinCEN, however we ask the Conference to study FinCEN’s language as an example of a carefully-drafted compromise that reflects the needs of law enforcement as well as business realities.

The Conference’s current language is also similar to the recordkeeping requirements proposed in the first draft of the BitLicense released by New York State’s Department of Financial Services (NYDFS). NYDFS, upon review of public comments, revised its proposal and reworked the recordkeeping language specifically to accommodate these unique features of virtual currencies as follows:

[Licensees must record:] (1) for each transaction, the amount, date, and precise time of the transaction, any payment instructions, the total amount of fees and charges received and paid to, by, or on behalf of the Licensee, and the names, account numbers, and physical addresses of (i) the party or parties to the transaction that are customers or accountholders of the Licensee; and (ii) to the extent practicable, any other parties to the transaction;\textsuperscript{83}

\textsuperscript{78} See 31 C.F.R. §§1022.400 and 1010.312.
\textsuperscript{80} 31 C.F.R. § 1010.312.
\textsuperscript{83} See New York Department of State Department of Financial Services, PROPOSED NEW YORK CODES, RULES AND REGULATIONS TITLE 23. DEPARTMENT OF FINANCIAL SERVICES CHAPTER 1. REGULATIONS OF THE SUPERINTENDENT OF FINANCIAL
We believe the compromise selected by NYDFS also offers a feasible requirement that can serve the needs of law enforcement while still preserving the openness and viability of virtual currency technologies.

Finally, for the same reasons discussed above, the language at 7(f)iv., “For foreign transactions, country of destination” should also be removed or modified with “to the extent practicable.” Just as transactions do not travel with IP addresses or personally identifying information, they also cannot be classified by country of destination. We respectfully add that foreign asset control policy, and the foreign policy from which it is derived, is properly a function of the federal government, not the states. This passage likely duplicates efforts by the Department of Treasury’s Office of Foreign Assets Control and Financial Crimes Enforcement Network and is probably unnecessary. It would also enhance the case for federal preemption of state money transmission law, because of the difficulties inherent in complying with disparate rules set by multiple levels of government.

**IV. Conclusion**

The Conference is to be commended for its forward-thinking goal: bringing consistency to state laws and thereby reducing barriers to innovation. If the recommended modifications described above are adopted by the Conference, and subsequently by the states, innovative American businesses will flourish and federal preemption will become unnecessary. Together, the states will pave the way for safer, faster currencies, as well as the wellspring of commerce that may follow.

We thank you for this opportunity to comment.