

Bitquant Research Laboratories (Asia) Ltd.
B-25, 3/F, Citicorp Centre; 18 Whitfield Road; Tin Hau, Hong Kong

DFS Office of General Counsel
New York State Department of Financial Services
One State Street
New York, NY 10004

Office of the Attorney General
Division of Appeals & Opinions
The State Capitol
Albany, NY 12224

Office of the Attorney General
Investor Protection Bureau
The State Capitol
Albany, NY 12224

2014 October 14

Greetings:

On 23 July 2014, the New York Department of Financial Services ("NYDFS") issued a request for comment on proposed rule-making regarding virtual currencies. We are writing this letter in response to this request for comment. As our response involves issues concerning the legal authority of the NYDFS to issue such regulations, as well as recommendations concerning the use of the Martin Act in virtual currency regulation, we have also forwarded our comments to both the Division of Appeals and Opinions as well as the Investor Protection Bureau within the office of the Attorney General.

Our company, Bitquant Research Laboratories (Asia) Ltd. is a Hong Kong based company, which provides open source analytics and quantitative consulting services to financial institutions regarding products and services surrounding cryptocurrencies. Although we have no current or planned business operations in the state of New York, we share the goals of the NYDFS in creating a well regulated and vibrant industry surrounding virtual currencies, and we welcome the Department's efforts to solicit opinions in this matter.

We believe that the state of New York has a legitimate interest in protecting the residents of the state of New York from both consumer fraud and illicit use of virtual currencies to further illegal activities such as money laundering, and we are very interested in creating a proper regulatory system for the use of virtual currencies.

It is therefore of great regret that we find that NYDFS proposal is on extremely weak legal foundations. It is not merely the details of the proposal that are problematic, but the entire regulatory approach of extending a discretionary licensing system suitable for money transmission businesses to any business handling virtual currency. Not only is creating such a licensing system not in the public interest, we firmly believe that it exceeds the authority of the NYDFS under both New York state and federal law, and

Bitquant Research Laboratories (Asia) Ltd.
B-25, 3/F, Citicorp Centre; 18 Whitfield Road; Tin Hau, Hong Kong

would not survive a legal challenge in either federal or New York state court.

We assert that both state and federal courts would find that the discretionary licensing system that NYDFS has created for money transmission businesses is permissible only as a result of a special grant of authority from Congress and the New York state legislature. These grants of authority do not cover businesses, which are not money transmission businesses, and therefore, as a matter of law, the NYDFS is limited in its ability to require discretionary licensing system to regulate a virtual currency business, in the event that the federal government has determined the business is not a money transmission business.

In order to place the proposed regulations on solid legal ground, we respectfully recommend the following three-pronged approach:

- 1) That the proposed regulations be made applicable **only** to businesses that under New York state law are currently subject to discretionary licensing by the NYDFS;
- 2) That for the purpose of consumer protection, that the main regulatory mechanism should make aggressive use of the Martin Act by the Attorney-General of the state of New York;
- 3) That for the purpose of anti-money laundering that the main regulatory mechanism should be the Bank Secrecy Act and the registration requirements and regulations issued by the United States Department of Treasury through FinCEN.

Finally, we believe that time is of the essence if the NYDFS wishes to have a role in the field of virtual currency regulation. Our legal arguments suggest that virtual currencies businesses which involved in interstate commerce and which are not money transmitting businesses have the legal authority to begin doing business in New York state without reference to the NYDFS. If NYDFS wishes to have any role in virtual currency regulation, it must quickly and clearly produce a regulatory system, which conforms to the legal constraints that we have identified in this letter. We look forward to NYDFS working with the virtual currency community in doing so.

We shall now present our legal arguments in detail.

**TREATING ALL VIRTUAL CURRENCY BUSINESSES AS MONEY TRANSMITTERS
CONFLICTS WITH THE DORMANT COMMERCE CLAUSE**

NYDFS proposes taking a discretionary licensing system, which is similar to that of money transmitters and apply it to all businesses involving some use virtual currency. Under New York state law, the authority to regulate money transmitters arises from Article 13-B of the New York state Banking Law and Section 301 of the Financial Services Law. The powers of the state of New York must be exercised in a manner that is consistent with the United States Constitution, which places the exclusive authority to regulate interstate commerce in the hands of the federal government. In order to avoid conflict between the New York state law and federal law, section 104(a)(2) of the Financial Services law specifically excludes from regulation by the NYDFS products and

Bitquant Research Laboratories (Asia) Ltd.

B-25, 3/F, Citicorp Centre; 18 Whitfield Road; Tin Hau, Hong Kong

services where "where rules or regulations promulgated by the superintendent on such financial product or service would be preempted by federal law."

With respect to discretionary licensing of money transmitters there is no conflict between state and federal laws. In 18 USC 1960, Congress has specifically made operating a money transmission business without a license in violation of state law a federal crime. This expresses a clear intention by Congress that a special licensing system is necessary to combat money laundering, and given that Congress has expressed a clear intention that states have the power to institute licensing requirements for money transmitters, there is no conflict between the powers of NYDFS and Federal law (see Western & Southern Life Ins. v. State Board of California, 451 U.S. 648 (1981)), and therefore the commerce clause does not limit the authority of NYDFS to require licensing of money transmitters under New York state law regardless of the impact on interstate commerce.

However, it is critical to note that this regulatory system of state licensing of out-of-state money transmitters can be legally justified only because Congress has expressed a clear intention to allow states to license money transmitters in 18 USC 1960. With respect to virtual currency businesses—which are **not** money transmitters—Congress has not expressed such an intention, and therefore the rules under the "dormant commerce clause" apply, and there are severe restrictions on the ability of a state to issue regulations which impact interstate commerce.

One could attempt to argue that all virtual currency businesses are money transmission businesses and therefore argue that they all fall under this Congressional authorization. However, it our firm opinion that this argument simply will not work, as the United States FinCEN has issued rules that specifically and explicitly state that some businesses which the NYDFS regulation defines as "virtual currency businesses" are specifically not "money transmitters"; as such, are exempt from the licensing and registration requirements of 18 USC 1960. FIN-2013-G001 issued by FinCEN on 18 March 2013, for example provides detailed guidance as to when a transaction is considered a "money transmission" and excludes a number of situations such as if a broker or dealer accepts and transmits funds solely for effecting a purchase or sale of real currency or other commodities. FIN-2014-R001 and FIN-2014-R002 issued on 30 January 2014 clarified that Bitcoin miners, software developers, and investment pools are not money services businesses or money transmitters.

One could then attempt to argue that FIN-2013-G001, FIN-2014-R001, and FIN-2014-R002 applies only to the definition of money transmitter under the Bank Secrecy Act and that a state could take a different definition of money transmitter. However, we argue that this argument is not viable. 18 USC 1960 refers to the registration requirements of 31 USC 5330 which is part of the Bank Secrecy Act, and hence a finding by FinCEN that a business is not a money transmitter removes it from the scope of 18 USC 1960. If a state attempts to define "money transmitter" in a way that is different from the FinCEN regulations, this would place those businesses outside of Congressional authorization for state licensing in 18 USC 1960, and the "dormant commerce clause" would become active.

Bitquant Research Laboratories (Asia) Ltd.
B-25, 3/F, Citicorp Centre; 18 Whitfield Road; Tin Hau, Hong Kong

Given that an agency of the federal government has determined that there are virtual currency businesses, which are outside of the scope of the state licensing system authorized by Congress in 18 USC 1960, we must now perform a "dormant commerce clause" analysis to determine if the proposed regulations are consistent with federal law with respect to those businesses. It is our firm belief that a court would find that the proposed regulations are inconsistent with the dormant commerce clause and invalidate the regulations on constitutional grounds.

Under the federal system of the United States, the power to regulate commerce between the states as well as commerce with foreign nations is an exclusive power of the United States federal government. Under the principle of the "dormant commerce clause," where Congress has chosen not to act, states are limited in their authority to propose restrictions on interstate commerce. This division of power is settled law and has been reflected in a long line of courts cases beginning with Gibbons v. Ogden, 22 U.S. 1 (1824) and extending through Wabash, St. Louis & Pacific Railway Company v. Illinois, 118 U.S. 557 (1886).

The current law regarding the dormant commerce clause first involves a test to see if the proposed state action is discriminative toward businesses outside of the state. If it is, then it would need to be reviewed under the tests set out in Hunt v. Washington State Apple Advertising Commission, 432 U.S. 333 (1977), in which strict scrutiny will be applied and the regulation will only be allowed if there is no less restrictive method of insuring that the regulation advances a state interest.

If the proposed state action were not discriminative, then the standard used would be Pike v. Bruce Church, Inc. 397 U.S. 137 (1970). Under this standard a restriction on interstate commerce would be found to be in violation of the dormant commerce clause if the burdens on commerce are clearly in excess of the local legitimate state interests advanced. Significantly, the Supreme Court has ruled that federal courts must review whether in fact the regulation will advance the stated purposes of the regulation (see Raymond Motor Transportation, Inc. v. Rice, 434 U.S. 429 (1978) and Kassel v. Consolidated Freightways Corp. 450 US 662 (1981)).

In contrast to regulations, which do not affect interstate commerce, it is insufficient to merely state a "rational basis" for a regulation, but rather it is necessary to demonstrate that the regulations do in fact promote legitimate state interests. Where a regulation affects interstate commerce, it is insufficient to rely on vague and hypothetical arguments as to how the proposal might advance state interests. Conversely, a state must provide solid evidence that the regulation does in fact promote state interests and that these interests outweigh the burden to interstate commerce.

We argue that the regulations proposed by the NYDFS in their current form are so clearly in conflict with the dormant commerce clause that should the NYDFS attempt to enforce these regulations against any businesses outside of the state of New York which are not currently subject to licensing, they will be almost immediately be challenged in federal

court where they would likely be struck down.

The NYDFS's proposed regulations are clearly discriminative against out-of-state virtual currency businesses. The requirement that any one doing business with non-US entities conduct enhanced due-diligence is clearly discriminative on its face for entities outside of the United States. In addition, a business that is another country or another state, would find it inconvenient and burdensome to interact with officials within the state of New York, and would find it difficult, or impossible to, for example, attend a licensing hearing in person or challenge an administrative decision in state court. In such a situation, the federal courts will apply strict scrutiny and will only allow the regulation if it can be shown that no other regulatory system will work.

While consumer protection and prevention of money laundering is clearly a legitimate state interest, we do not believe that the state of New York can demonstrate in court that no other system of regulation will advance these interests, particularly given the determination by FinCEN that some businesses that would be covered under New York state licensing do not require Federal registration as money service businesses. We note here that the federal government created alternative systems for the prevention of money laundering, including registration of money service businesses and mandatory reporting of suspicious activity. In cases, where a virtual currency business is subject to a less restrictive federal requirement, it would be extremely difficult to provide a convincing argument that the NYDFS state regulations are the least restrictive necessary.

With respect to consumer fraud, the state of New York can use consumer fraud statutes against those that seek to defraud the residents of the state of New York, and there is absolutely no evidence that simply using existing laws on consumer protection will not achieve the interest in consumer protection.

With regard to prevention of money laundering, the regulations proposed by NYDFS including businesses that the federal government through FinCEN has explicitly concluded should **not** be regulated as money transmission businesses. In addition, while virtual currencies have been used for illicit purposes, federal agencies have been extremely aggressive and successful at closing down such activities, and there has been no suggestion that an intrusive and extensive use of licensing would prevent money laundering.

Finally if these regulations are enacted, a federal judge will ask the state of New York why it is necessary to impose restrictive licensing on virtual currencies and coins, when no such restrictive licensing exists for physical currency and coins. Yes, virtual currencies can be used for illicit purposes but so can physical currency and coins. As the state of New York has not imposed mandatory licensing for gold coin dealers or currency exchangers when not involved in money transmission, a federal judge will ask NYDFS why these are necessary for virtual coin and virtual currency.

Even if the regulation were non-discriminative, they would impose massive and unreasonable burdens on interstate and international commerce. Because no rationale has

Bitquant Research Laboratories (Asia) Ltd.

B-25, 3/F, Citicorp Centre; 18 Whitfield Road; Tin Hau, Hong Kong

been advanced as to how these regulations would in fact protect consumers or prevent money laundering, we believe that non-discriminative regulations would be found to be overly and unnecessarily intrusive for the same reasons that discriminative regulations would be found to be problematic.

Again, we wish to emphasize here that the federal courts would not merely subject the regulations to a "rational basis" standard in which the state of New York could advance a speculative reason why these regulations would advance consumer protection or prevent money laundering, but would subject the regulations to further scrutiny and a "Pike balancing test" in which the state of New York would be compelled to explain how these regulations, in fact, advance consumer protection or prevent money laundering and whether the real benefits provided by the regulation outweigh the substantial burdens imposed on interstate commerce.

Therefore, the question of what makes it necessary to impose licensing regulations on virtual currency and coins that simply do not exist with physical currency and coin is not a hypothetical or abstract question. It is one that a federal judge will ask the state of New York in federal court, and which NYDFS must be prepared to answer.

We do not believe that the state of New York could demonstrate this in federal court, and therefore we believe that it would be tremendous mistake and waste of resources to use the current regulatory approach.

IT IS QUESTIONABLE WHETHER VIRTUAL CURRENCIES ARE INDEED A FINANCIAL PRODUCT OR SERVICE

There are additional legal difficulties in this proposal under New York State law. These difficulties are significant because they would impact regulation of virtual currency businesses which are situated within the state of New York and which interstate considerations do not apply.

First of all, it is very unclear whether virtual currencies are in fact "financial products or services." Virtual currencies can be used to store and transmit monetary value, but so can postage stamps, gold coin, or bales of cotton. We believe that there is strong question as to whether or not virtual currencies can be classified as financial products and services; and whether NYDFS has any more authority to require licensing of virtual currency dealers than it does to require licensing of dealers of physical gold coin or physical currency exchange dealers where there is no actual money transmission involved.

We very strongly urge that the NYDFS clarify on what basis it considers virtual currencies to be a "financial product or service" and why it feels that it has both the legal authority and the public interest reasons why it is necessary to impose special licensing on virtual currency, when no such regulations exist for physical coins or currency. As with the similar questions concerning the "dormant commerce clause" these are not abstract or hypothetical questions, as if the NYDFS does not clarify the legal basis and public interest rationale for these particular regulations now, it will be forced to do so

when they are challenged in state court.

Even if one were to concede that virtual currencies are a "financial product or service" there remain severe problems with the proposed licensing system under New York state law.

THE NYDFS DOES NOT HAVE AUTHORITY TO REQUIRE LICENSING OF BUSINESSES SUBJECT TO THE MARTIN ACT

The NYDFS does not have authority over products "regulated for the purpose of consumer or investor protection by any other state agency, state department or state public authority;" as defined in the section 2-A which states:

(2-a) A "financial product or service regulated for the purpose of consumer or investor protection": (A) shall include (i) any product or service for which registration or licensing is required or for which the offeror or provider is required to be registered or licensed by state law, (ii) any product or service as to which provisions for consumer or investor protection are specifically set forth for such product or service by state statute or regulation and (iii) securities, commodities and real property subject to the provisions of article twenty-three-a of the general business law, and (B) shall not include products or services solely subject to other general laws or regulations for the protection of consumers or investors.

This section excludes securities, commodities, and real property, which are subject to the Martin Act from regulation by the NYDFS and places them under the jurisdiction of the Attorney-General. The Martin Act is primarily an anti-fraud statute that gives the Attorney-General extensive powers to combat securities and commodities fraud, but does not impose any licensing requirements on the sales of securities and commodities. As cryptocurrencies are considered by many jurisdictions and agencies such as the Internal Revenue Service to be a "virtual commodity," we believe that it is clear that under New York state law, the primary enforcement mechanism against fraud belongs to the Attorney General, and that the NYDFS does not have the legislative authority to impose licensing requirements on virtual currency businesses where those businesses are not involved in money transmission as defined by FinCEN.

THE NYDFS DOES NOT HAVE AUTHORITY TO REQUIRE LICENSING OF NON-CONSUMER BUSINESSES

There is yet an addition problem with the proposed regulations.

Under Section 104 of the Financial Services Law, the financial products and services, which are subject to regulation by the superintendent include:

(2) "Financial product or service" shall mean: (A) any financial product or financial service offered or provided by any person regulated or required to be

Bitquant Research Laboratories (Asia) Ltd.

B-25, 3/F, Citicorp Centre; 18 Whitfield Road; Tin Hau, Hong Kong

regulated by the superintendent pursuant to the banking law or the insurance law or any financial product or service offered or sold to consumers except financial products or services: (i) regulated under the exclusive jurisdiction of a federal agency or authority, (ii) regulated for the purpose of consumer or investor protection by any other state agency, state department or state public authority, or (iii) where rules or regulations promulgated by the superintendent on such financial product or service would be preempted by federal law;

Financial products and services that are not offered or sold to consumers are not subject to regulation by the NYDFS and therefore the NYDFS has no power to compel licensing of a business where there is no pre-existing law, which allows for such licensing.

LICENSING SHOULD ONLY APPLY TO BUSINESSES SUCH AS MONEY TRANSMITTERS, WHICH ARE ALREADY UNDER NYDFS JURISDICTION. FOR OTHER BUSINESSES THE PRIMARY MECHANISM FOR INVESTOR AND CONSUMER PROTECTION SHOULD BE THE NEW YORK STATE MARTIN ACT AND THE PRIMARY MECHANISM FOR ANTI-MONEY LAUNDERING SHOULD BE THE FEDERAL BANK SECRECY ACT

It is our view that under New York state law and United States federal law, a general licensing system for virtual currency businesses is unworkable. At the very least to propose a regulatory structure which is similar to the one that has already been advanced would require the NYDFS to justify the legal basis of the regulations and the public interest rationale for the regulations far more extensively than they have done so far.

We believe that it would be a waste of time and effort to introduce regulations of such weak legal foundation only to have them be overturned later. Such a path would not only subject virtual currency businesses to legal uncertainty, but would also be detrimental to the shared goal of consumer protection and money laundering prevention.

To the extent that new regulation is needed for businesses that are already subject to licensing, such as money transmitters, we believe that the proposed regulations add administrative clarity, and we do not object to the proposed regulations provided that they are limited to businesses, which are already under the administrative jurisdiction of the NYDFS.

We therefore recommend the following:

Recommendation #1: we strongly recommend that Section 200.3(a) of the proposed virtual currency regulations be amended to read:

No Person may in the course of performing a transaction subject to regulation by this agency under the laws of the state of New York shall without a license obtained from the superintendent as provided in this Part, engage in any Virtual Currency Business Activity.

Bitquant Research Laboratories (Asia) Ltd.

B-25, 3/F, Citicorp Centre; 18 Whitfield Road; Tin Hau, Hong Kong

The effect of this change would be to empower businesses, which are already under NYDFS regulation to undertake virtual currency activities, while not extending NYDFS authority to businesses, which are not subject to NYDFS authority under either state or federal law.

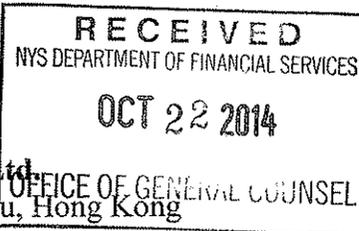
Recommendation #2: we strongly recommend that the NYDFS abandon discretionary licensing as the primary regulation mechanism for virtual currency businesses, which are not subject to regulation as money transmitters, and instead work with the Attorney General to improve investor education and aggressively combat fraud using the Martin Act. In cases where there is suspected money laundering and illegal activity, we believe that the best approach is to work with the federal government and agencies such as FinCEN to develop a single national standard.

An aggressive anti-fraud program under the Martin Act imposes no fewer regulatory burdens on most virtual currency businesses outside of the state of New York while advancing a legitimate state interest of consumer protection, and unlike the licensing system proposed is consistent with the "dormant commerce clause." In addition, it is consistent with New York state law and provides both legal certainty and soundness for virtual currency regulation.

Recommendation #3: with respect to anti-money laundering, virtual currency businesses doing business with or in the United States are already required to comply with the terms of the Bank Secrecy Act and associated money laundering provisions. We do not see the need to add any further restrictions on the use of virtual currencies. Where such restrictions are found to be necessary, they should be initiated at the federal level.

Finally, we believe that time of the essence if the NYDFS and the state of New York wish to have a role in the field of virtual currency regulation. Our legal arguments suggest that virtual currencies businesses which involved in interstate commerce and which are not money transmitting businesses have the legal authority to begin doing business in New York state without reference to the NYDFS. It is our position that a interstate virtual currency business which is not a money transmitting business under federal law, can begin operations in New York state immediately without reference to any future regulations proposed by the NYDFS, as those future regulations cannot exceed the constraints outlined in this letter.

If state of New York wishes to have any role in virtual currency regulation, it must quickly and clearly produce a regulatory system, which conforms to the legal constraints that we have identified in this letter. If there were disputes as to the validity of the arguments we have outlined in this letter, it would be in the interests of the state of New York to very quickly and forcefully challenge the arguments we have outlined. The legal arguments we have outlined are well known in the virtual currency community, and should the state of New York not act quickly, it will have the effect of giving a green light for interstate non-money transmitting virtual currency businesses to operate in the state of New York, which would make it far more difficult and expensive should the state of New York choose to challenge the arguments at a later time.



Bitquant Research Laboratories (Asia) Ltd.
B-25, 3/F, Citicorp Centre; 18 Whitfield Road; Tin Hau, Hong Kong

We believe that the wisest course of action to use existing regulations and laws rather than create new ones. To focus efforts at the federal law would result in the manageable burden of dealing with one set of standards rather than 51 conflicting ones. In addition, both the Bank Secrecy Act and the Martin Act are decades old and have been subject to numerous court challenges so that their legal validity is not under question, unlike any completely new regulatory system.

We believe that most virtual currency businesses are honest and well-meaning people who share the goal of regulators in creating a vibrant and sound system of virtual currency. We also believe that regulatory activities should be focused on eliminating and punishing bad actors, which seek to defraud or commit illegal activities against residents of the state of New York. Accordingly we believe that the proper regulatory mechanism is not through a licensing mechanism, which imposes burdens on the honest, but through criminal and civil fraud sanctions, which impose burdens on the dishonest, and not to create new regulatory mechanisms but to use existing ones.

Although we believe the current approach taken by the NYDFS is legally unworkable, we believe that we share common goals with the state of New York in preventing consumer fraud and money laundering. We hope that our comments are taken seriously and look forward to cooperating with state of New York in any way, which is consistent with federal law and the laws of the state of New York.

Sincerely,

Joseph Chen-Yu WANG
Chief Scientist
Bitquant Research Laboratories (Asia) Ltd.