



300 Montgomery Street, 12<sup>th</sup> floor  
San Francisco, CA 94104

February 20, 2015

Chris Kirkpatrick  
Secretary  
Commodity Futures Trading Commission  
Three Lafayette Center  
1155 21<sup>st</sup> NW  
Washington, DC 20581

**Re: LedgerX, LLC Applications for Registration as a Derivatives Clearing Organization and Swap Execution Facility. IF 14-006**

Dear Mr. Kirkpatrick:

Ripple Labs, Inc. welcomes the opportunity to comment on the applications submitted by LedgerX LLC ("LedgerX") to the Commodity Futures Trading Commission ("CFTC") for registration as a Derivatives Clearing Organization ("DCO") and a Swap Execution Facility ("SEF").

**I. Ripple Labs Supports the Approval of a Derivatives Clearing Organization and a Swaps Execution Facility for Virtual Currency Derivatives**

Ripple Labs strongly believes that the CFTC should take an active role in the process of creating an appropriate regulatory framework for the safe and effective trading and clearing of virtual currency derivatives.<sup>1</sup> As discussed below, Ripple Labs's virtual currency, the XRP, is an essential element of the Ripple protocol, an open protocol through which national currencies (sometimes referred to as fiat currencies) and other commodities may be safely and efficiently bought and sold, far more quickly and at a greatly reduced cost as compared with effecting such transactions using traditional payment mechanisms.

Ripple Labs believes that federal regulation of derivatives on virtual currencies is a positive and necessary development, and firms like LedgerX that seek to become regulated derivative exchanges and clearinghouses in this increasingly important area of the financial markets, should be given serious consideration, in line with that accorded to other derivatives businesses. We agree with other commenters that a DCO or SEF, such as proposed by Ledger X, would play an important role in the development of virtual currency markets by enhancing liquidity and providing a secure venue for holders of these commodities to manage short and long term risk.<sup>2</sup> Similar to regulated markets for other financial products, LedgerX's SEF could serve the critical role of providing price transparency and a

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<sup>1</sup> Virtual currencies are a math-based subset of digital currencies generally.

<sup>2</sup> See comment letter from Jeremy Liew, Partner, Lightspeed Venture Partners on IF-14006 at <http://comments.cftc.gov/PublicComments/ViewComment.aspx?id=60286&SearchText=>; see also comment letter from Fred Ehrsam, Co-founder, Coinbase on IF-14006, at <http://comments.cftc.gov/PublicComments/ViewComment.aspx?id=60339&SearchText=>.

level playing field for market participants in virtual currency derivatives to transact. As the CFTC is well aware, a regulated derivatives market generally increases liquidity and improves price discovery in the underlying instruments. As a result, transaction costs would likely be reduced with regard to virtual currency transactions, in the event such a market is allowed to develop, with increased fraud protections for market participants.

If the CFTC determines to approve the LedgerX's applications to register as a DCO and a SEF, Ripple Labs respectfully requests that the basis for the derivative instruments on which LedgerX could execute and clear transactions not be limited to Bitcoin *per se*, but should be extended to such other virtual currencies as LedgerX determines would benefit from such services, including without limitation XRPs.

## II. **Background of Ripple Labs and the Ripple Protocol**

Ripple Labs is a technology company that developed the Ripple protocol, an open payments infrastructure for real-time processing of financial transactions. Our objectives in building and supporting the Ripple protocol are to facilitate more transparent and efficient payments systems, reduce friction between financial institutions and currencies, and broaden access to financial services.<sup>33</sup>

The Ripple protocol is a universal, open protocol for money transfer that allows independent payment systems to communicate as easily as email systems do. Just as SMTP created a shared standard for email a number of years ago, Ripple provides a shared standard for payments. As with the SMTP protocol used in email, no one owns the Ripple protocol, and there is no central operator. Ripple is based on an open standard that allows servers all over the world to communicate peer-to-peer financial transactions to one another.

The Ripple protocol enables interoperability between networks, banks and clearing houses as an open Internet protocol called RTXP, or the Ripple Transaction Protocol. The Ripple protocol is therefore neutral as between parties to any transaction. As a payment infrastructure, it is designed to be used directly by: (1) banks and financial services businesses; (2) payment networks; and (3) liquidity providers. It can be used consistently with existing messaging standards, governance and rules of the networks that adopt the protocol.

The Ripple protocol contains a ledger that bilaterally processes payments between banks, other financial services firms, and payment systems in real-time. Unlike other payment networks, which typically rely on a central counterparty for processing transactions, Ripple transactions are validated via consensus: a process native to Ripple by which a collection of authorized counterparties validate transactions through a distributed network. Having many parties engage in consensus via a distributed network maximizes operational redundancy, thereby minimizing risk of system failure.

### Advantages of the Ripple Protocol

The Ripple protocol offers greater transaction visibility for the sending and receiving of funds (including foreign exchange) and other commodities than is the case using conventional payments infrastructure. The bilateral connectivity of the Ripple protocol simplifies the transaction path and thereby improves

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<sup>33</sup> For more information on Ripple Labs and the Ripple protocol, see [https://ripple.com/files/ripple\\_primer.pdf](https://ripple.com/files/ripple_primer.pdf).

traceability between sender and receiver. Further, banks and other users of the Ripple protocol can exchange more payment information (e.g., fee pre-disclosure, balance validation, confirmation) before and after settlement.

The transparency offered by the Ripple protocol has the potential to greatly improve anti-money laundering efforts of financial institutions while lowering their costs of compliance. Furthermore, the distributed network created by the Ripple protocol maximizes redundancy across the parties on the Ripple protocol. This process means that systemic operation of the Ripple protocol does not rely on any single party, but rather it is shared across the participants on the network. A large majority of independent participants would therefore need to fail for the system to cease operating. Moreover, unlike other payment networks, which rely on a central operator, it is virtually impossible for control or power within Ripple to become concentrated in any one or few parties.

In the context of cross-border payments, the Ripple protocol maximizes the payment reach of banks and other financial institutions while minimizing their risks and reserve requirements. Unlike the current system of international payments, which requires banks to place reserves or collateral at each of their correspondent financial institutions to minimize counterparty risk, the Ripple protocol settles transactions bilaterally, eliminating the need for correspondents and the need to post multiple reserves. Instead of posting reserves at each correspondent, banks only have to allot one reserve to Ripple, which enables access to all currencies, liquidity providers and payment networks on the protocol.

Finally, because the Ripple protocol can replace the central counterparty with a distributed network and consensus process discussed above, it offers its users real-time payment processing 24 hours a day, seven days a week, 365 days a year. The increased speed and continuous access to payment services vastly improves the efficiency of networks and saves costs.

#### XRP: A Digital Currency That Ensures Operational Efficiency and Security

A key component of the Ripple protocol is the math-based currency native to it, XRP. XRP differs from other known virtual currencies, such as Bitcoin, in two important ways: (1) it is an optional “bridge” currency between illiquid markets within the Ripple protocol; and (2) it provides a secure mechanism for the efficient transfer of funds.

XRP is the only native asset on the Ripple protocol; all other funds are IOUs that are backed by deposits in the banks’ accounts. This allows XRP to be used as a common denominator between currencies on the network. Typically, a bank must open a nostro account and post reserves at correspondents for access to each foreign currency. If a bank lacks the payment volume to justify posting reserves to a particular region, it simply goes without access to the applicable foreign currency. Posting reserves to each country (or correspondent) is costly.

Using Ripple, a bank can post one reserve and use XRP as a bridge into all currencies on the network. This mechanism creates an efficient transaction path between currencies and maximizes currency liquidity. However, it is important to note that the use of XRP as a bridge currency is completely optional. Users can freely opt to transact only in fiat currencies.



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XRP's second role is as a security mechanism for the Ripple protocol. All users of the Ripple protocol are required to hold a small reserve of 20 XRPs to use the protocol. A small fraction of an XRP is destroyed with each transaction (approximately 0.00001 XRP, or about one one-hundred-thousandth of a penny in U.S. dollar terms). In this way, XRP is similar to a postage stamp for transactions on the Ripple protocol. The small portion of the XRP that is destroyed is not a fee collected by anyone, but rather is a cost of using the Ripple protocol.

Under normal network volumes, this XRP cost remains very small. However, in the event that a participant tries to overwhelm the network with illicit activity – for example, a large number of fake transactions in a denial of service attack – the Ripple protocol's requirement to use XRPs for each transaction would exponentially increase the cost of each transaction. This feature is intended to quickly bankrupt a bad actor of its XRP reserves, thereby prohibiting additional traffic from its account. In this way, XRP ensures the security and stability of the Ripple protocol at a minimal cost to users.

### III. **Conclusion**

Ripple supports the proper federal regulation of SEFs and DCOs for derivatives based on virtual currencies generally. As stated above, we believe a well-organized, properly regulated market for derivative instruments based on virtual currencies, such as the XRP, would inure to the benefit of holders of those virtual currencies, while protecting the marketplace for such virtual currencies as a whole.

We appreciate the opportunity to comment on the LedgerX applications. Ripple Labs would be happy to discuss further any of the information or comments above with CFTC members or its staff. Please contact Jack Drogin at 202-778-6422 or Kenneth W. McCracken at 202-778-6409 of Schiff Hardin LLP, Ripple Lab's outside counsel, or the undersigned with any questions or comments.

Sincerely,

A handwritten signature in black ink that reads "Norman M. Reed". The signature is written in a cursive style with a large initial "N".

Norman M. Reed  
General Counsel

Cc: Jack P. Drogin  
Kenneth W. McCracken  
Karen Gifford