

Technical Paper 07 Version 2  
EXC as a Vehicle Currency  
Importance of Low Cost Operation  
17<sup>th</sup> September, 2018<sup>1</sup>

**Abstract:**

In order to become a vehicle currency, there are four features required. Highest level of security, fast settlement time, ability to handle large volume transactions, and low transaction cost.

The EXC Platform is equipped with all four features which might qualify it to become the 'vehicle currency' platform for cryptocurrencies as well as for any digital transaction between exotic fiat currencies.

**Background and Conclusion:**

Vehicle currency is a medium of exchange between currencies, as explained in their thesis on VEHICLE CURRENCY by Michael B. Devereux and Shouyong Shi<sup>2</sup>. In the 17<sup>th</sup> and 18<sup>th</sup> centuries, the Dutch Guilder was the most accepted vehicle currency for international trade, with the British Pound taking over the role until the Second World War.

A vehicle currency performs the same function on the foreign exchange market as that of money on the goods market: instead of exchanging South African Rand directly into Japanese Yen, rather South African Rands change into British Pounds and British Pounds change into Japanese Yen simultaneously. This is because the transaction fee and spread between South African Rand and Japanese Yen is typically higher than the sum of the transaction fee and spread between the South African Rand and the British Pound and the fee and spread between the British Pound and the Japanese Yen.<sup>3</sup>

The reason why one needs to use a vehicle currency in FX transactions is simple. There is not enough demand & supply or selling & buying for a more minor/exotic currency to another currency at the same time that a party wishes to exchange to another currency. Unless there is certain level of demand for forex exchange from both sides of the currencies at that particular point in time, the spread is likely to be wide. Also, a large volume of supply would make an impact moving the currency price substantially, which most people want to avoid as the average transaction price would be distorted and become disadvantageous. In order to create a liquid FX market, the transaction cost and fast settlement are two key factors. If for example, Bitcoin's spread is 7% and ETH's spread is 8%, while Monacoin's spread is 10%. It would thus be very costly for a crypto owner to exchange one into another crypto currency using one of them as a medium to exchange.

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<sup>2</sup> Source: International Economic Review, Vol.54, No.1, February 2013, See [http://www.jstor.org/stable/23352320?seq=1#page\\_scan\\_tab\\_contents](http://www.jstor.org/stable/23352320?seq=1#page_scan_tab_contents)

<sup>3</sup> Source: <http://www.encyclo.co.uk/meaning-of-Vehicle%20currency>

Also, the settlement time of 65 minutes on average for Bitcoin and 3 minutes for ETH is a problem as the price of currencies could move quickly in a matter of seconds.

### **Learning from the Japanese market 2006 to 2009**

When Koji Fusa was a controlling shareholder of EMCOM, a system development company supporting FX brokers in Japan, he gained deep first hand experience of the reverse correlation between transaction costs and transaction volumes. Initially, Japanese brokers charged both transaction fees of 1% and the spread of 1% resulting in a total cost of 1.5% to the retail customer per transaction. When brokers decided to waive the 1% transaction fee, and charge only the spread, the average cost for the retail customer fell by two thirds. This had the immediate effect of causing the market to expand about by nine times.<sup>4</sup>

### **US Dollar and EXC**

For FX transactions of major currencies versus the US dollar, a number of brokers offer the spread equivalent to 0.3 basis points or 0.003% of the transaction value and keep the total transaction cost less than 0.03%. This has resulted in the global fiat FX market becoming extremely large.

The EXC Platform is able to offer similar or a better total transaction cost structure which includes the fee, spread and energy costs at 0.01% to 0.03%, with settlement having the ability to be performed within a second. Consequently, EXC can become an alternative to the US dollar as a vehicle currency.

In addition to the EXC Platform possessing the important feature of minimal cost of operation, its settlement ability is about 0.2 seconds, much shorter than the typical next day settlement for fiat FX transactions. EXC therefore has the greatest potential to become a vehicle currency, initially for cryptocurrencies, but also for fiat FX currencies for countries such as Russia and China, who might resent using the US dollar as a vehicle currency.<sup>56</sup>

### **Changes to structure**

The supervisors may amend this document and the structure, functions or any other aspects of Excor, GMF, the EXC Platform, the EXC token and/or the token offering at any time in their sole discretion if, for example (but not limited to), the tax, legal or regulatory position changes or it is more favourable from a tax, legal or regulatory position to make such amendments.

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<sup>4</sup> Excor was unable to verify this hypothesis as there is no record to show the direct correlation between fees and volume. However, various economic theories of international trade assume that there would be more transactions as the transaction cost reduces.

<sup>5</sup> Russian President Putin is a strong advocate of using the crypto ruble as an alternative vehicle currency for international trade. As retaliation against President Trump's protectionist politics, western allies of the US including the EU, Britain, Japan, Canada, have stated that they are annoyed by the imposition of unilateral tariffs imposed by the US government. It is possible some western countries may find EXC a better option as GMF will offer governments around the world the facility to exchange each country's currency with EXC as reserves.

<sup>6</sup> The governor of People Bank of China delivered a speech after the 2008 Credit Crisis and Lehman shock that the world should shift away from the US dollar to a supernational currency, one such as EXC which is equipped with all those features mentioned above.