

Multilateral offsetting for the global commodity trade using blockchain technologies and stable unit of account tied to IMF SDR to minimize the SWIFT usage

Option 1. Direct communication between buyer and seller

For example, there's a seller (manufacturer of goods or a service provider) in Venezuela, and a buyer in Russia. Note: blockchain protocol works similar no matter the participants' type: physical persons, companies, private or governmental, commercial or non-profits.

Trade deal algorithm:

- The parties sign a barter contract in which the goods are changed to an intangible digital asset (XDR). The contract specifies the value of the goods equivalent to USD, SDR or local currency, depending on the legislation of a country. For example, in Russia, you can nominate contracts in USD and SDR, with reference to the Central Bank or the IMF SDR rate.
- To simplify the work with customs, it is recommended to specify the post-payment for the goods in the contract.
- The buyer transfers XDR to the seller's wallet according to the contract. The transaction is settled within 20 seconds and is free for both the sender and the receiving party.
- How to put XDR on balance sheet and quarterly financial reports:
 - In the International Financial Reporting Standard (IFRS), one can use the following lines: IFRS 5 Non-current assets held for sale or IFRS 9 Financial Assets.
 - When submitting quarterly reports, the XDR price is converted to the local currency at the IMF SDR rate and specified in line 1240 as part of current assets.
- How to pay taxes on transactions with XDR: In the same way as with any barter transactions. VAT and customs fees are calculated based on the value of the contract as usual. Capital (property) tax is paid according to the quarterly financial reports.
- What to do with XDR:
 - Use retail exchange to swap into BTC, ETH, USD, SGD.
 - Bitforex(<https://bitforex.com/>) — one of the largest digital exchanges, already listed Mile blockchain assets.
 - Golbex(<https://golbex.com/>) — Singapore's first legal exchange for the fiat-digital assets swap, will be launched in December-January.
 - Use OTC-desk: <https://mrkt.cash/offers/USD/MILE/>
 - Buy other goods and services using the same barter algorithm.
- Where to get XDR:
 - Buy at the retail exchange or at the OTC desk.
 - Earn after the barter deal.
 - Get your own emission center or a blockchain master node.
- Note: Mile Unity Foundation provides free contract templates to use in the cross-border commodity trade and also provides basic consulting on how to use them .
- Wallet creation and XDR transactions are free inside the blockchain.

Option 2. Using the financial service providers to aggregate the transactions

Reasonable and convenient development of the Option 1.

Each country that participates in the ecosystem creates a new financial institution or a subproject within the existing one. These financial institutions are becoming a proxy operators to perform the clearing of counter transactions between the countries. It allows to simplify the financial logistics for the buyers and sellers.

The algorithm:

- Let's expand the Venezuela-Russia example.
- At least one bank-operator is selected in each country.
- Instead of carrying out each transaction from Venezuela to Russia and back via SWIFT, both banks forward the XDRs between themselves. And they move the local fiat money between local importers and exporters within their personal accounts.
- Clearing is performed once in X days. Blockchain automatically calculates the XDR balances after all the transactions. If one party has more XDRs, the other party is buying them with one single SWIFT-payment.
- As a result, all participants significantly reduce the use of SWIFT and USD.
- The more new participants are joining the ecosystem, the closer the multilateral netting to zero, the less SWIFT volume is needed.
- The more XDR liquidity is increasing, the less fiat clearing is needed.

Example:

- The Bank of Venezuela and the Bank of Russia have 10 customers-importers and 10 exporters.
- Within a week, 10 million XDR were transferred from Venezuela to Russia.
- From Russia to Venezuela — 9.5 million XDR.
- At the end of the week, banks perform automatic clearing based on their blockchain transactions, and agree that it's necessary to send 0.5 million XDR equivalent of Fiat (USD) to maintain an equal balance.
- This transaction is carried out as a barter of 0.5 million XDR for the corresponding amount of USD (see Option 1 for a description of the algorithm.)
- Also, as a result of clearing, the Bank in Venezuela redistributes the bolivars between its Venezuelan customers (importers and exporters), and the Bank of Russia allocates roubles between its Russian customers.

Note:

- XDR blockchain technology allows to perform clearing between any number of countries and companies. I.e. when identifying chains of trade partners with close to zero mutual trade balance, XDR transactions can replace the fiat money movement.

Option 3. Commodity offsettings market

It's even more convenient than Option 2.

The algorithm:

- To register a cooperative market platform for the commodity offsettings in the neutral zone with loyal regulatory environment (AIFC regulatory sandbox in Kazakhstan with British law, for example).
- Any international trade operations participant can, if desired, join to co-op (electronically) and connect the server to sign and store the transactions (become a blockchain node).
- Each participant may sign up at the market, pass the moderation, and offer to list his token.
- Each token is a template electronic contract for the right to claim a physical asset in a certain country, valid for a certain time. For example: for the supply of 1 ton of aluminum in Russia until 31 December 2018, or to supply 1 barrel of oil in Venezuela until January 30, 2019.
- All tokens are traded to the electronic IMF SDR.
- All trading operations are written in the cooperative blockchain, i.e. each participant can participate in the signing of transactions, and in the storage of the transaction register.
- E.g. blockchain acts as a clearing operator.
- To perform a cross-border transaction, it is enough to buy or sell the tokens for the XDRs. Market-makers can make a lot of deals during the day or a week and then clear them in XDRs.
- The blockchain trading platform is already working and is currently being adapted to the needs of commodity-offsets.

Additional benefits of XDR

Any participant can become a blockchain master node (connect the server to the network and process the transactions) and the network will reward it with 8-13% annual XDR interest rate on the master node deposit. This is equivalent to a discount on goods in the ecosystem.

Also, one can set up an emission center via depositing the MILE digital asset, then he will be able to issue XDRs while the ecosystems' M1 (money mass in XDR) is growing. E.g. if one set up an emission center when the M1 was 10B XDR, and then the ecosystem have grown up to 100B XDR, he will earn x10 on his deposit in emission centers.

Briefly about Mile Unity Foundation

Mile Unity Foundation is a public benefit international organisation, educating governments, enterprises, engineers and media about the applications of blockchain technologies to provide an equal access to the cross-border transactions, trade, investments and money remittance, and to strengthen international relations. More at: <https://mile.global/>

Foundation is an official partner of the BRICS Alliance, Global Silk Road Association (One Belt One Road Initiative), Brazil Trade-Commerce Chamber, Astana Akimat, AstanaHub and other governmental and supranational organizations.

Learn more: <https://mile.global/>