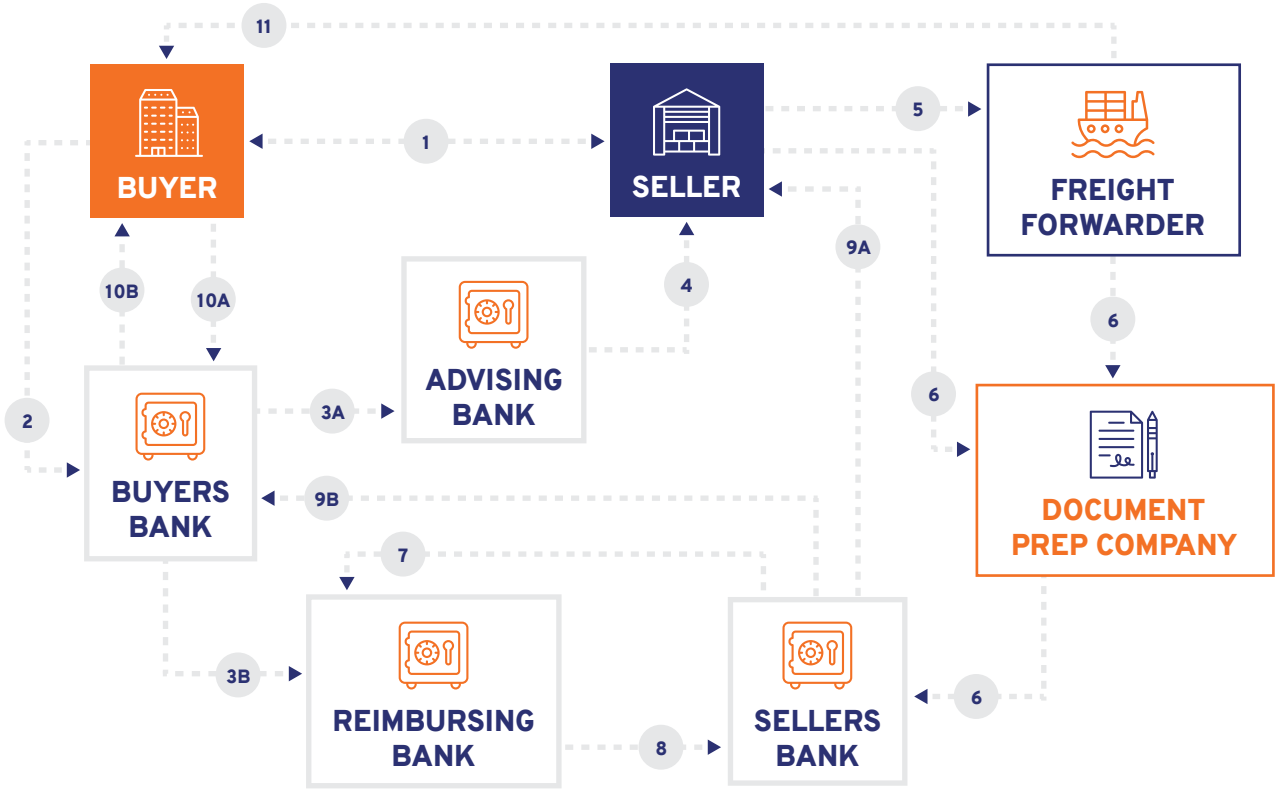
ConsiliumGroup

Consilium Trade Finance

Trade finance process analysis

DESIGNED BY IIRTH.CO

Current As-Is



STEP 1: Contract
The buyer agrees to purchase goods from the seller using a letter of credit as the mechanism of payment

STEP 2: LOC Application
The buyer applies to his bank for a letter of credit, signing the bank's letter of credit application/agreement form

STEP 3A: LOC
After approving the application, the issuing bank issues the actual letter of credit instrument and forwards it to their chosen advising bank

STEP 3B: Reimbursement Authorisation
At the time the L/C is sent, the issuing bank also sends a reimbursement authorization to their chosen reimbursing bank. This bank is the clearing bank the issuing bank uses when making payments in the currency of the L/C and will play a role when the time comes to pay the L/C

STEP 4: LOC
The advising bank authenticates the letter of credit and delivers it to the beneficiary (the seller). If the issuing bank has requested them to do so, the advising bank may add their confirmation to the L/C (and thereby become the confirming bank

STEP 5: Goods
Having received the issuing bank's assurance of payment (and that of the confirming bank if the L/C has been confirmed), the seller delivers goods to a freight forwarder, who ships the merchandise to the buyer

STEP 6: LOC & Documents
The seller, the freight forwarder, and/or a document preparation company prepares the documents called for in the letter of credit and presents them to the "nominated bank." The letter of credit may nominate a specific bank where documents are to be presented or it may say it is "available with any bank," giving the seller the freedom to choose where to present documents. If the L/C has been confirmed, documents must be presented to the advising/confirming bank

STEP 7: Reimbursement Claim
The nominated bank examines the documents and, if they comply, obtains funds for payment to the beneficiary in accordance with the terms of the letter of credit, generally by sending a reimbursement claim to the reimbursing bank

STEP 8: Reimbursement
The reimbursing bank matches the negotiating bank's claim against the reimbursement authorizations they are holding, charges the issuing bank's account, and transfers funds to the nominated bank

STEP 9A: LOC
The nominated bank transfers payment to the beneficiary (seller)

STEP 9B: Documents
Sellers Bank forwards the documents to the issuing bank

STEP 10A & B: Debit & Documents
The issuing bank examines the documents. If it agrees with the nominated bank that the documents comply with the letter of credit, the issuing bank obtains payment from the applicant (buyer) in accordance with the terms of the applicant's letter of credit agreement and forwards the documents to the applicant

STEP 11: Goods
The applicant (buyer) uses the documents to pick up the merchandise from the carrier, completing the letter of credit cycle

Current As-Is Issues

Time & Cost
On average there is a cost of $43k per $1mn LoC (4.3%) [source: US department of Commerce].

This includes operational/legal fees and excludes the actual cost of the LoC.

There is also unaccounted for interdepartmental BAU costs within the Financial Institutions.

The process is physical paper driven with the associated costs between each part of the process including physical correspondence between each of the parties in the process.

Errors in documentation also increase the time for completion and an on occasions nullify the whole transaction.

Some vendors charge per LoC transaction increasing the costs further (BankTrade Cloud Version – Misys charge £16k for every Trade transaction).

On average a LoC setup can take 20 day, to 6 weeks; if there are no errors and depending on the geographies of the seller/buyer.

The Bank Levy ranges from between 1%-8% depending on the type of goods and the Geography.

Risks
Credit Risk; As the LoC is handled by Banks there is credit risk associated with the Banks involved in the transaction.

Fraud Risk; all conditions within a LoC have to be adhered to, it is possible for the beneficiary to create fraudulent documents to satisfy the FI they are dealing with

Buyers Risk;

- Receipt of inferior quality goods
- Exchange rate risk

Sellers Risk;

- Non compliance of the LoC conditions
- Counterfeit LoC issuance

Documentary Risk; errors in documentation can lead to severe delays in the completion of the paperwork as well as the shipment of goods; this also has a knock on effect to FX rate risk as the prices can either go up or down

A further documentary risk is from freight forwarders who may make mistakes in the shipping documents which can again invalidate the whole transaction

Complexity
The whole process is very complex and involves various parties all of whom need to agree to each part of the process; disagreements to the terms and conditions can either delay or nullify a transaction

The documentation is usually the main cause of errors; once a document containing the terms and conditions has been amended this needs to be agreed by all parties

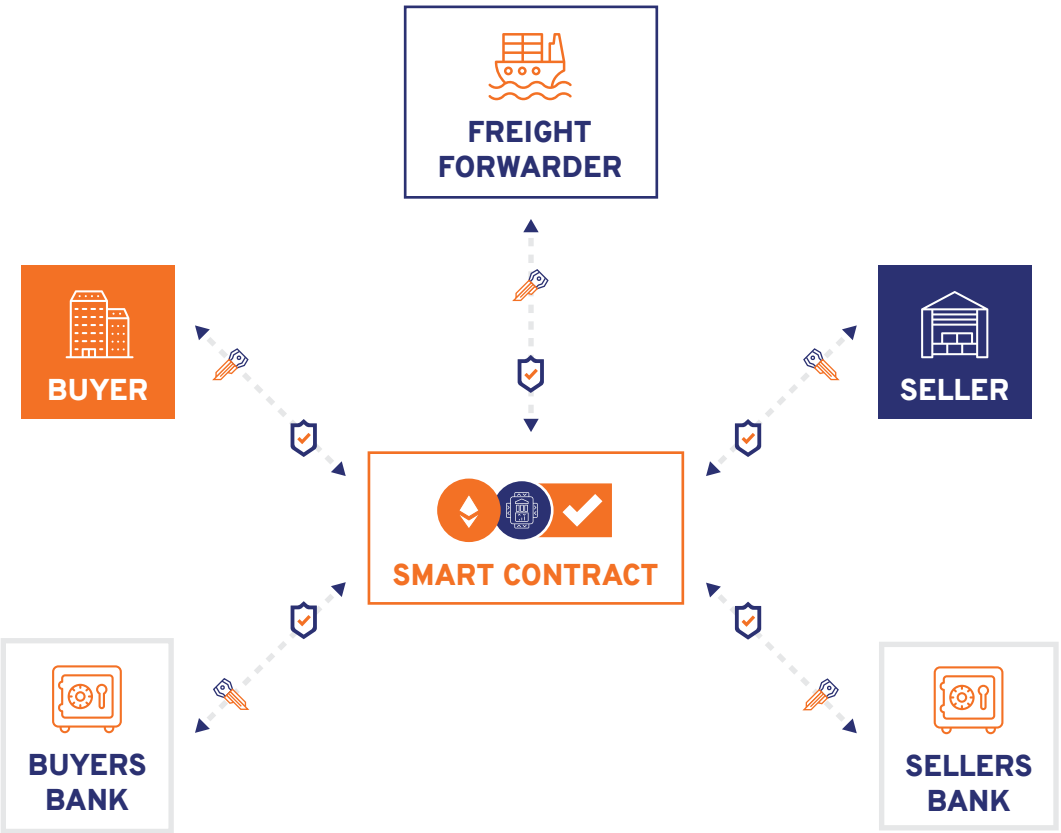
Geographical concerns;

- The process gets further complicated dependent upon the geographies involved this can lead to increased time for the completion of documentation or the release/receipt of goods

- Intermediaries are used by the Exporter in certain geographies driving the costs up further

Regulatory issues; there are a maze of regulations dependent upon geography, this can also make the whole transaction even more complicated

A Trade Finance Solution by Consilium



A 7 step solution to the issurance of LoC's

STEP 1:
The buyer creates the LoC application through Consilium system for the importer bank to review, and stores it on the Blockchain as a Smart Contract.

STEP 2:
The buyers bank receives notification to review the LoC block/record and can approve or reject it based on the data provided. Once checked and approved, access is then provided to the sellers bank for approval.

STEP 3:
The sellers bank approves or rejects the LoC. If approved, the seller is able to view the LoC requirements and is prompted to view through the application.

STEP 4:
The seller completes the shipment, adds invoice and export application data and attaches a photo/digital image of any other required documents. Once validated, these documents are stored on the Blockchain Smart Contract.

STEP 5:
The documents are reviewed by the sellers bank, which approves or rejects the Application.

STEP 6:
The buyers bank reviews the data and images against the LoC requirements, marking any discrepancies for review by the buyer. When approved, the LoC goes straight to completed status or is sent to the buyer for settlement.

STEP 7:
If required due to a discrepancy, the buyer can review the export documents and approve or reject them.

Time & Cost
Blockchain reduces the cost of LoC issuance significantly as the average cost of the transaction is reduced thanks to the digital Smart Contracts, and the time taken to execute them.

Smart contracts will be specialised per asset/commodity class;

All Asset Classes will be set up as part of the Smart Contract development;

- Precious Metals: Gold, Silver, Platinum, etc.
- Other Metals: Nickel, Aluminum, Copper, etc.
- Agro-Based Commodities: Wheat, Corn, Cotton, Oils, Oil seeds, etc.
- Soft Commodities: Coffee, Cocoa, Sugar, etc.
- Live-Stock: Live Cattle, Poultry, Sheep, etc.
- Energy: Crude Oil, Natural Gas, Gasoline, etc.

Ledger to ledger means the Financial Institution costs reduce almost 80% and also if the buyer and Seller agree there will be no need for an advising and/or reimbursing bank reducing the cost further.

Correspondence is digital and based purely on the immutable smart contracts and any associated images; this means less paperwork and less physical correspondence between the parties.

Errors in documentation can be amended with the permission of each parties very quickly decreasing the time for completion and reducing the transactson risk.

As opposed to the minimum 20 day traditional LoC setup, Smart contracts can be setup and completed between 4 hours to a maximum of 1 day (dependant upon the complexity of the asset class).

The Bank Levy ranges from between 1-8% depending on the type of goods and geography (e.g it can be as high as 27% in Ghana as provided by Ghana Commercial Bank); with Smart contracts this can be reduced further as the operational costs decrease.

Risks
Credit Risk; As the LoC is handled by Banks there is credit risk associated with the Banks involved in the transaction; this is always a risk for any bank if they are financing the actual trade.

Fraud Risk; as the Blocks are immutable in the transaction, and viewed/accessible to all parties in the transaction who also validate their parts of the transaction, the risk of fraud is nullified.

Buyers Risk;

- Receipt of inferior quality goods – This is reduced as the smart contract will ensure that the goods are guaranteed of a certain quality as agreed between both parties.
- Exchange rate risk is reduced as the time for completion of the LoC is reduced.

Sellers Risk;

- Non compliance of the LoC conditions – The Smart Contract is an immutable contract, verified by all parties nullifying this risk.
- Counterfeit LoC issuance – Blockchain Smart Contract validates authenticity.

Documentary Risk; None – Errors reduced as information is stored within a Block eliminating the need for rekeying in data throughout the Trade system. All information available to relevant stakeholders with real time accessibility of any data within the transaction or for progress updates.

Complexity

The whole process is simplified using immutable Smart Contracts.

Documentation is usually the main cause of errors; Immutable Smart Contracts and easy amendments make the process run a lot smoother

Geographical concerns;
The process gets further complicated dependent upon the geographies involved, this can lead to increased time for the completion of documentation or the release/receipt of goods – using standardised Smart Contracts for each step of the process

Intermediaries are used by the Exporter in certain geographies driving the costs up further – with Smart Contracts the use of Intermediaries becomes more viable as the costs are decreased significantly from the traditional LoC issuance

Regulatory issues; As this solution has Network Neutrality, there is a not a single owner of the network meaning participants can easily "plug in" their information as part of the trade transaction. Current Regulatory barriers; as this is a neutral network it lowers the usage and adoption barriers for regulatory organisations (Governments/Insurers etc.) to "view" any transaction to ensure that there are no unfair advantages to any one party