**FAC Fund Launch Pilot – Outline Test Plan**

The aim of the fund launch pilot is to establish a ‘close to real’ sandbox operating environment, in which we will launch and operate a tokenised fund on a distributed ledger. This will exercise the end-to-end funds process and will include all oversight and reporting functions necessary to reflect the normal operation of a mutual fund, properly and effectively. The pilot will run over an approximately 8-week period starting in Q3/4 2020.

The primary business objective is to confirm the feasibility of delivering a transformational platform for funds servicing, demonstrating significant operational and cost benefits to its participants, and achieving industry and regulatory support for a live implementation.

The pilot will be focused on the expected go to market version of FAC: a market platform for many participants to operate on, supporting the launch of a new kind of tokenised fund which is issued directly on the distributed ledger, with no support from conventional issuance structures. The experience and learning from the pilot will contribute to the planning for a live production implementation.

**Overview of Pilot Process**

FAC will deploy a dedicated instance of an FAC Distributed Ledger network to support the fund launch pilot. The testing will involve launching a fund onto the FAC platform with a tokenised share issuance and conduct ‘true-to-life’ fund operations with the active collaboration of all parties involved in servicing the fund.

The aim is to replicate as far as possible the end-to-end workflows of the fund involving off ledger parties where necessary (i.e fund accountant and custodian) so that the impact of the distributed ledger model can be fully evaluated.

**Preparation**

Prior to the start of the pilot all participants will need an understanding of the proposed operating model and the implications of adopting distributed ledgers and tokenisation. FAC will facilitate this though an induction process and there will be additional workshops to deep dive into how the network operates, the roles and responsibilities of participants and the legal and regulatory implications for launching a tokenised fund.

**Scope of Testing**

Testing will follow the typical ‘day in the life of a fund’ workflow (DITLOAF), from investors placing orders, through cut-off, valuation, pricing and settlement with all the associated controls, checks and decision points that are part of this process.

Once launched, the fund will be operated by the participants through a series of DITLOAF business cycles. The workflow is very similar to a conventional daily dealing forward priced fund flow, but there are significant differences in its execution that are achieved through the use of Distributed Ledger Technology and the testing will be designed to highlight these differences.

The principle impacts on the funds servicing process are:

* **Investor participation increases and becomes direct**. Investors/ Concentrators will be active participants on the network, not at the other end of a Swift connection or a fax machine. They will manage their own data and they will have to approve any updates that impact their node on the ledger.
* **Tokens are like ‘bearer shares’**. Mutual fund shares (and most versions of cash) are currently dematerialised, and exist as book-entries.  The process of tokenisation effectively creates a ‘bearer share’ in a digital format.
* **The transaction record is the transaction**. On issuance, the fund token is transferred to the Investor node: that is the transaction and the transaction record. It is immobilised at the node, in the Investor’s safekeeping, until the Investor delivers it back to the Fund node at redemption.
* **There is no centralised register of shares**. The location of tokens at nodes defines the ledger. A TA can no longer claim primary authority over the ledger and cannot reassign ownership by simply updating their own records: tokens have to move and the Investors have to agree to that.
* **Tokenisation (of assets AND cash) redefines settlement**. There is no need for intermediate client money accounts as settlement becomes a bilateral exchange of cash and assets where both parties must be present and authorise the transfer together. As a consequence the Transfer Agent has significantly less involvement with managing cash, and there is no longer a need to match cash receipts to deals or reconcile banks accounts to ledger transactions and balances.

The test plan will also focus on identifying the key operation benefits identified in the earlier TA2.0 PoC exercise, specifically:

* Reduction in queries from Fund Managers.
* Significant reduction in processing time and risk for transaction management and settlement activities.
* Significant reduction in processing time and risk for registration activities.
* Elimination of conventional reconciliation function.

**Test Scenarios**

Detailed test planning will be scenario based and derived from the core set of workflows defined below.

| **Test scenario** | **Rationale / Benefit** |
| --- | --- |
| Setup and maintain a fund. | Demonstrates improvement in time to market for launching new funds. Customer experience and revenue opportunities. |
| Convert Investor and Fund fiat currency at the Cash Exchange and issue cash tokens onto the network. | Exercises the role of the Cash Exchange and its relationship to the bank. Revenue generation from operating digital exchange |
| Issue tokenised units for the fund onto the network. | Demonstrates the simplicity of fund issuance without the creation of a conventional asset |
| Setup and maintain investor records. | Provides investors and service providers with experience of fund holding on FAC |
| Place, track and finalise investor buy, sell, transfer and switch operations with tokenised cash and assets on-ledger. | Demonstrates operational efficiency, cost reduction, reduced settlement risk and elimination of reconciliation. |
| Produce daily cash flow information against a cut-off point, load NAV prices and prices orders. | Demonstrates operational efficiency and cost reduction. |
| Demonstrate required controls and reports for regulatory oversight | Evidences adherence to regulatory requirements |
| Validate the accuracy and integrity of investor and fund cash and asset balances across a multi-day business cycle. | Validates integrity of register. Demonstrates risk reduction and improved regulatory oversight, and builds confidence in product and vision. |

**Timeline**

The pilot exercise will be carried out over Sept/Oct 2020. This period broken down as described below:

|  |  |  |
| --- | --- | --- |
| **Week** | **Stage** | **Action Plan** |
| 1 | Operational readiness 1 | Trial runs to ensure the network is properly configured and all participants are ready to embark on the testing process |
| 2 | Operational readiness 2 | Continuation of week one |
| 3 | Fund Launch 1 | Fund launch and operation across first business cycle |
| 4 | Fund launch 2 | Continued operation of fund over additional business cycles |
| 5 | Extended testing 1 | Additional testing to evaluate a wider range of operational conditions and exceptions outside of DITLOAF |
| 6 | Extended testing 2 | Continuation of week five including income distributions |
| 7 | Contingency | Set aside time for catch up or repeat testing |
| 8 | Fund closure and wrap up | Shut down test fund and review test outcomes |

Some flexibility will be required to ensure all participants activities can be aligned and issues encountered during the process can be resolved. Weeks are elapsed time only and do not indicate effort during the week which will be balanced to meet participants availability.

**Test Outcomes**

At the end of the pilot, the following deliverables should have been achieved:

* A verified set of end-to-end workflows, built to conduct the daily operations of a fund and to meet all necessary oversight and reporting requirements;
* An understanding of the key components of the fund prospectus and service provider agreement for an on-ledger fund and a proven process for launching an on-ledger, token-based fund;
* A set of prioritised activities necessary to bring the system to a production-ready state;
* A definition of the future state operating model enabled by the proposed system; and
* A business plan for realising TA 2.0, along with an operational and commercial plan for bringing it to market.

**Success Indicators**

* A broader understanding among the participants of how FAC enables transformative opportunities for funds servicing;
* Confidence across the respective teams, in the FAC platform and the collaborative nature of the potential partnership;
* An agreed view of how close FAC is to a solution for funds servicing and what would be required to bring it to production;
* Commitment for participant and SAG global fund managers to support the further development of FAC.