**Appendix D: business workflows**

**Business workflows**. DLT Technology: Hyperledger fabric. This appendix provides a recap of the workflows supported by TFDC. Workflows will be gradually detailed in this appendix.

**Workflows**

The table below identifies the various business processes targeted by TFDC platform.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Mnemonic** | **Workflow** | **Main peers\*** | **Theme** | **Note** |
| **ORDER** | Orders | INV – Investor  TAG - Transfer Agent | Operations | Orders handling and registry maintenance |
| **NAV** | NAV publication | ACC - Accountant | Operations | NAV calculation is outsourced.  Our process covers NAV dissemination only |
| **SETTLEMENT** | Orders settlement | INV – Investor  TAG - Transfer Agent  CUS – Custodian  CSH – Cash account holder | Operations | Many settlement scenarios are possible |
| **REGISTER** | Fund registration | REG – Regulator  ISR - Issuer | Legal – Fund master | Fund registration |
| **AGREEMENT** | Domestic distribution agreement | REG – Regulator  ISR – Issuer | Legal – Fund master | Regulator’s agreement to distribute under a given jurisdiction (UCITS is a special case of transnational jurisdiction) |
| **LEI** | LEI identification | LEI – LEI authority | Legal – Fund master | Request for a LEI code |
| **SECID** | Security identification | SIA – Security identification authority | Legal – Fund master | Request for an ISIN code |
| **DVP** | Circulation on settlement system | STL – Settlement system operator | Legal – Fund master | Authorization to settle on a DVP platform (e.g. Euroclear…) |
| **SERVICE** | Investment services agreement | ISR – Issuer | Operations | “Convention dépositaire” |
| **DISTRIB** | Distribution agreement | DIS – Distributor  ISR – Issuer | Intermediated dist. | Distribution contract between promoter (issuer) and distributer. Includes earmarking. |
| **ONBOARD** | Investor onboarding | DIS – Distributor | KYC | KYC process, including filings |
| **PARTY** | Party Agreement | REG – Regulator  CTK – Caretaker | Legal – Fund master | Regulator and caretaker to approve participants with a role under a given jurisdiction |
| **FISCAL** | Fiscal filings | RGR - Registra | Legal – Filings |  |
| **KIID** | KIID production | ? | Legal – Filing |  |
| **PRIIPS** | PRIIPS production | ? | Legal – Filings |  |

\*: Other peers may contribute to the workflow, but with a secondary role (e.g. passive validation).

**Extended workflows**

Such additional workflows (not in POCs) illustrate how the platform may extend beyond mere registry book-keeping and truly support large swathes of business activities.

|  |  |  |
| --- | --- | --- |
| **Workflow** | **Involved chaincodes** | **Comment** |
| Fund Liquidation | Fund  RegFundDir  DistFundDir |  |
| Fund Agreement Revocation | DistFundDir |  |
| Investor Liquidation | Investor  Fund | Liquidating an investor’s holdings upon investor’s death, compulsory liquidation, etc.. |

**APIs implementation workflows**

Whenever a chaincode participate in a workflow, a set of methods has to be deployed to define the protocol operating this workflow. These methods are grouped in APIs, with one API for each workflow.

A chaincode then may compose different API together: for some API’s in this composition, the chaincode manages the state, for some it is just a remote API user (the state is handled by a different API).