DERIVATIVES SERVICE BUREAU

MACHINE EXECUTABLE STANDARDS FOR DERIVATIVES REPORTING

18th October 2022

Agenda

1. About the Derivatives Service Bureau

2. Our Oversight Arrangements

3. Our Governance Model

4. Our Common Data Dictionary

5. Our Work on Machine Executable Standards

6. FIX Orchestra

About the Derivatives Service Bureau

- A **quasi-public entity** bringing **standardization** and transparency to the OTC derivatives markets

- Provider of the **OTC ISIN** to meet **MiFID/R II requirements** to enable regulators to detect market abuse, price manipulation, and risks to market integrity and financial stability

- Designated by the **Financial Services Board** in 2019 as the sole Service Provider for the **Unique Product Identifier** System to support the G20's aims to monitor financial risk in OTC derivatives markets

About the Derivatives Service Bureau (cont.)

- Operating under **cost recovery** principles and overseen by the international regulatory community including multiple EU authorities

- Our reference data is based on a **common data dictionary** that utilizes **ISO standards**

- Regular engagement with the ESMA, ECB, EC for **improved data quality** and **standardisation**

Our Oversight Arrangements

- We are a Registration Agency for several **ISO standards**, and we adhere to ISO's governance requirements, including following **cost-recovery** principles and **fair, reasonable and non-discriminatory** principles (FRAND)

- We are overseen by the **Regulatory Oversight Committee** (ROC), a group of 65 public authorities and 19 observers from 50+ countries

Our Oversight Arrangements (cont.)

- EU institutions are members of the ROC
  - **5 x EU authorities**: ESMA, EBA, ECB, EC, EIOPA
  - **15 x EU countries**: Austria, Bulgaria, Croatia, Finland, France, Germany, Hungary, Ireland, Italy, Luxembourg, Netherland, Poland, Portugal, Slovenia, Spain
  - **4 x EU country observers**: Belgium, Czech, Denmark, Sweden

- The ROC promotes the public interest by improving **data quality** in **regulatory reporting** through the **harmonization of standards** across jurisdictions

Our Governance Model

- Overseen by ISO and ROC

- Stewardship for service evolution via industry consultation and Industry Representation Groups

- Regulatory observer participation in Industry Representation Groups

- Governance validated by annual independent third party assurance audit
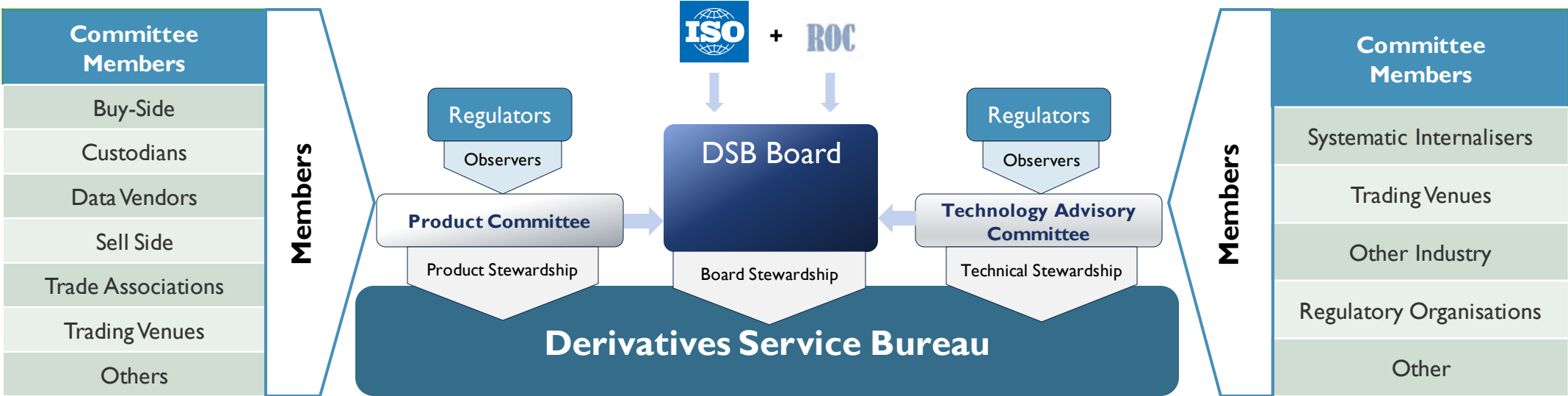
Our Common Data Dictionary

- The core of our common data dictionary is based on ISO standards such as **CFI**, **UPI** and **ISIN**

- We work with **ISO**, **public authorities** and our **IRG** to ensure the elements in our data dictionary remain aligned

- Our data dictionary forms the basis of multiple existing regulations, including

  - MiFID/R II

  - EMIR

- Our data dictionary is already defined in **machine executable format**, but not exposed publicly
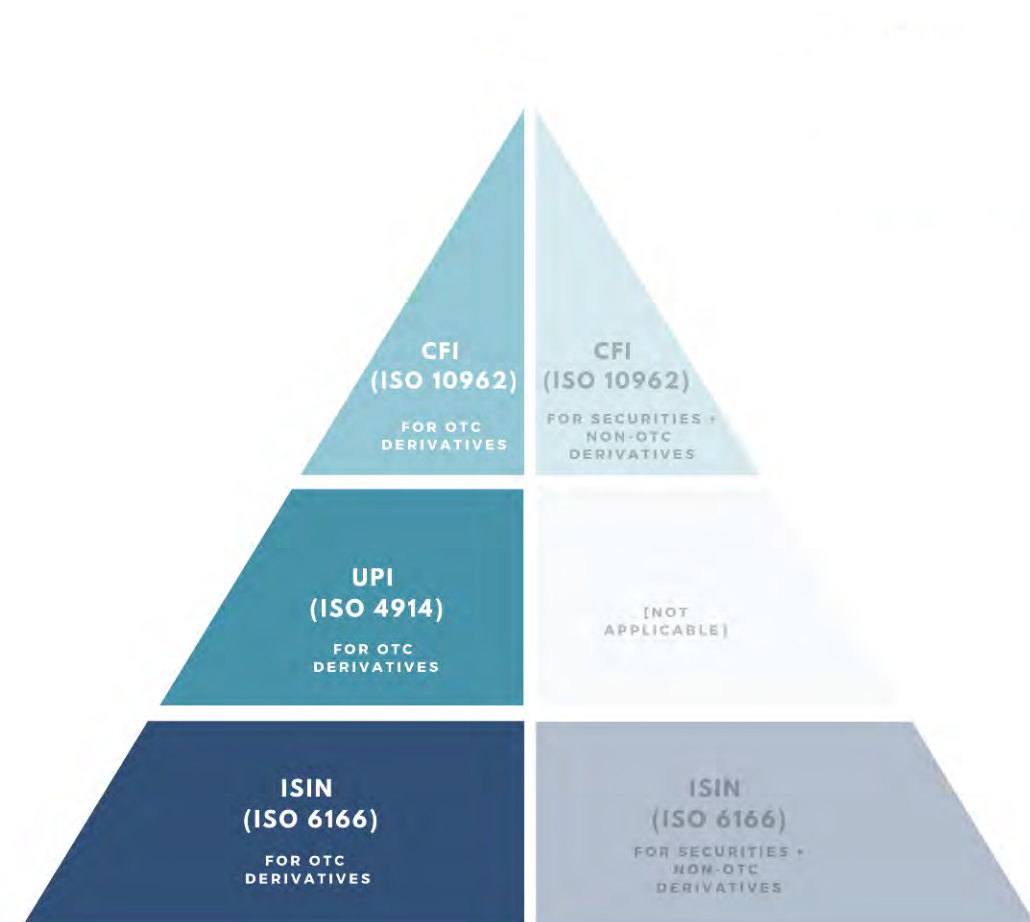
Our Work on Machine Executable Standards

- The ROC has requested us to explore the creation of **machine executable data validation rules** for derivatives reference data, based on **open-standards**

- The implementation of our **common data dictionary** already uses an open source standard from the FIX Trading Community called **FIX Orchestra**
https://www.fixtrading.org/standards/fix-orchestra/

- Given our close involvement with ISO, we have started to explore feasibility of **FIX Orchestra as an ISO standard**

- We have started to engage our Industry Representation Group to deliver on the ROC's request

FIX Orchestra Introduction

- Orchestra is an **open-source standard** for defining in a **machine-readable** manner the **workflows** and the **specifications** for communication between counterparties. I.e. the **rules of engagement**

- **ISO standards** form the building blocks of Orchestra. E.g. ISO 11404, ISO 15836, ISO 8601 etc.

- Orchestra is a **specification** and not an implementation. Multiple vendors can compete on implementations on an equal footing.

- Orchestra is **inherently more secure** than '*Turing complete*' approaches that rely on single vendor implementations. E.g. see: https://resources.sei.cmu.edu/asset_files/WhitePaper/2022_019_001_875314.pdf

- Orchestra is already **widely supported** in the capital markets for electronic trading workflows

- Orchestra is currently maintained by the FIX Trading Community. They have indicated they are amenable to consider **migrating Orchestra to ISO compliant governance**.

Orchestra Technical Details

Orchestra defines the following in machine executable format:

- Workflows and scenarios
- Messages
- Conditional Expressions
- Actors and their states
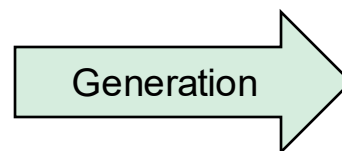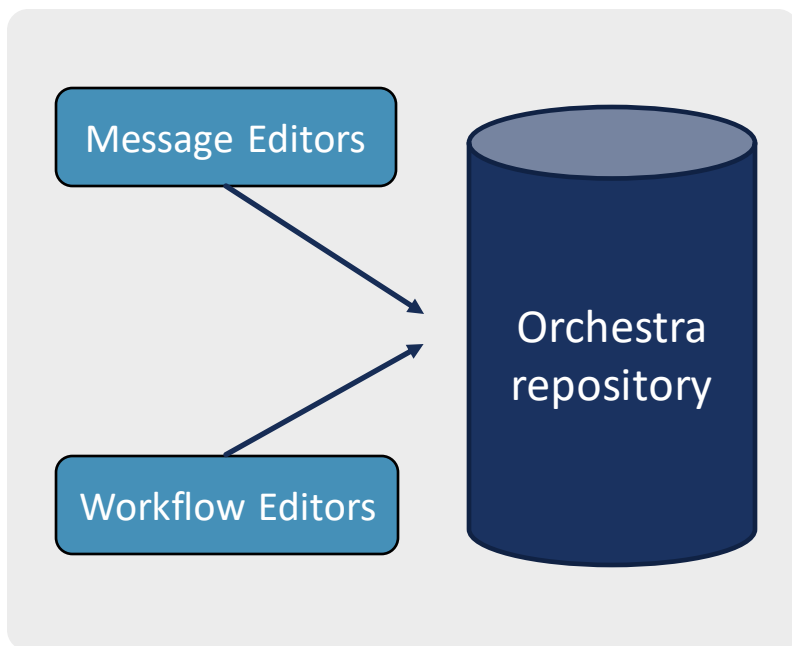- Service Configurations
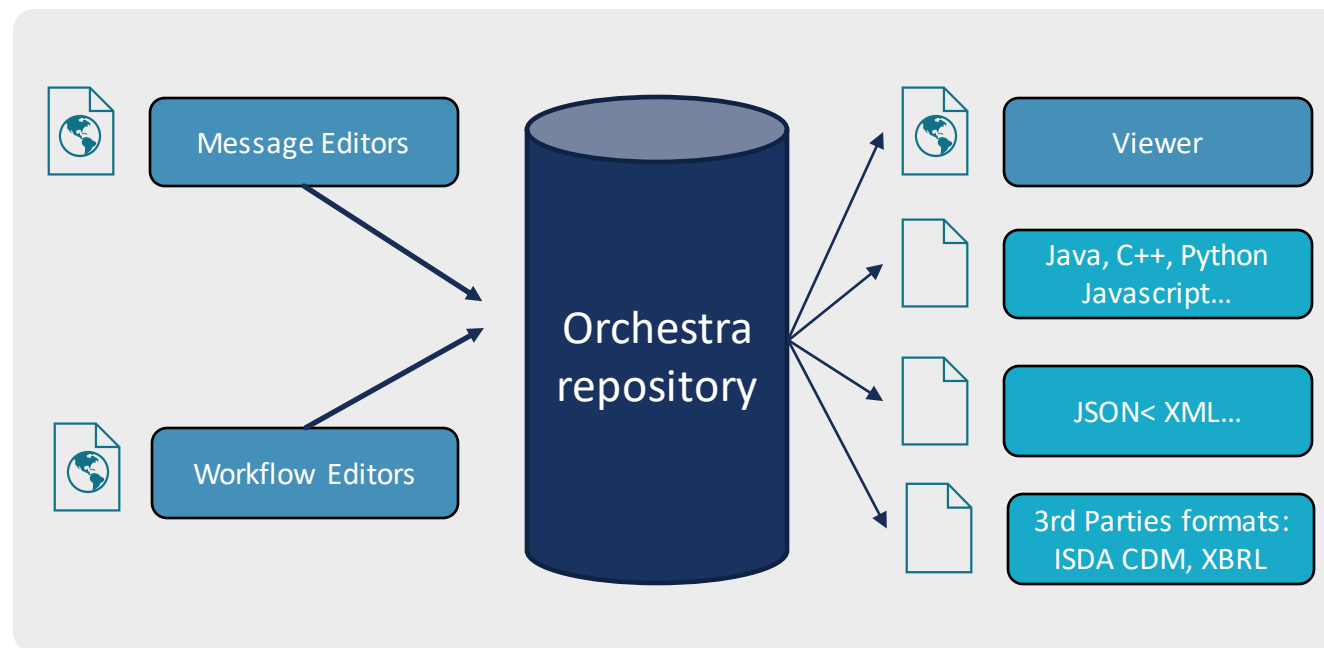
Orchestra guarantees **inter-operability across toolset implementations**.

Different vendors can implement their own Message Editors, Workflow Editors, Viewers, Languages, Third-party formats.
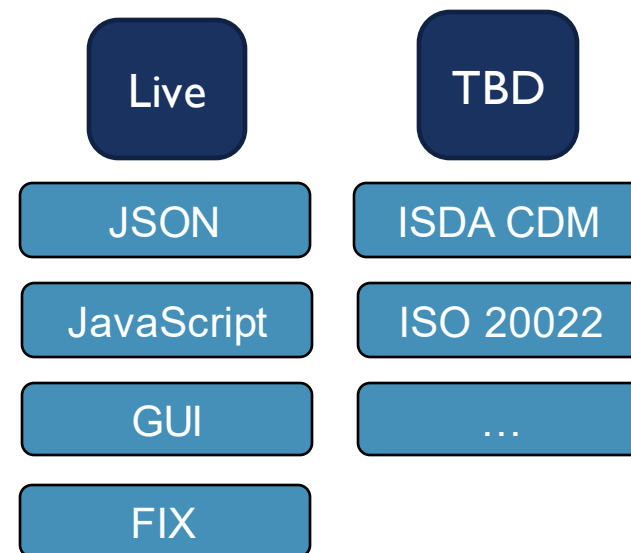
Orchestra Current & Potential Future State

The DSB's implementation of Orchestra has been live since Q4 2017

Specification

Implementation

Thank you!