

# Data Standards for Order Life Cycles





# SFC Data Standards for Order Life Cycles (DS-OL)

The Securities and Futures Commission (SFC) on 31 July 2019 issued a circular requiring Licensed Corporations (LCs) to comply with new data standards when submitting trading-related data upon request. The new requirements will come into effect on 1 October 2020 and are aimed at developing an industry-wide convention for data validation and the submission process.

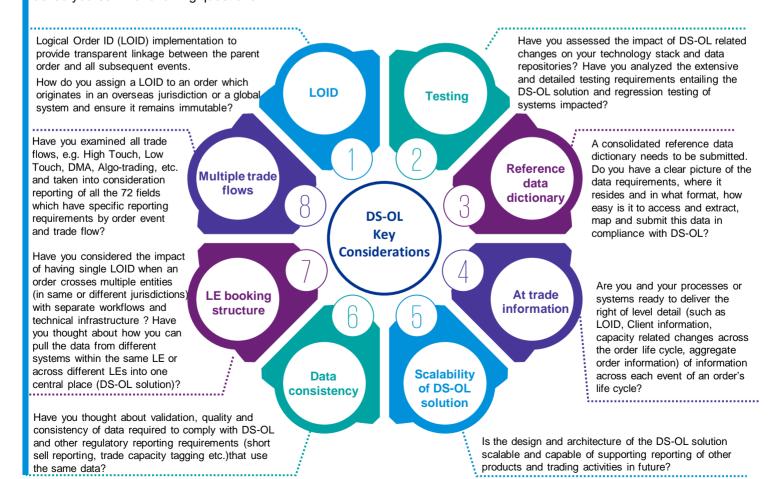
DS-OL aims to facilitate the reconstruction of the order life cycle from order receipt through final execution or cancellation. DS-OL will decompose the order life cycles into discrete events (excluding post-trade events) and will assign a unique identifier to each parent order and be recorded alongside all the events throughout the order life cycle.

Initially, only equities listed on the Stock Exchange of Hong Kong (SEHK) will be considered "In-Scope Products" for the purpose of complying with DS-OL. In addition, only brokers whose trading turnover in SEHK-listed equities in a calendar year reaches 2% of that year's total market trading volume will be considered in "In-Scope Brokers".



# Key Considerations and Challenges of DS-OL

DS-OL will only cover pre-trade and at-trade information which may or may not be readily available in the LCs' order management systems or data warehouse, therefore the In-Scope Brokers should think about planning and preparing for the technical and operational changes required to comply with the incoming data standards. Specifically, have you asked yourself the following questions:





Compliance with DS-OL will not only trigger system, but also operational and infrastructural changes. LCs should form a data governance committee to evaluate whether an investment should be made in a long-term DS-OL solution, or mobilise resources at the time when the SFC requests for trading data in the DS-OL format.

Irrespective of the chosen route, preparing to comply with DS-OL involves many different activities including identifying, collecting, and verifying data as well as operational considerations across a number of different functions. The outlined activities are not exhaustive, and LCs should perform an impact assessment in view of their respective operations and systems.

# **Data Governance**



- · Assess whether changes are required only in the data preparation layer or at the order management and other source systems level in order to capture fields/details required by DS-OL in the prescribed format and assess each approach's upstream and downstream impact
- Build DS-OL solution and reference data dictionary to prepare data files for submission
- Initiate budget discussions with local and/or global stakeholders to implement changes in local and/or global systems and prioritize the changes required by DS-OL



- Perform regulatory interpretation of DS-OL requirements and relay its impact to other regulatory reports
- · Provide regulatory advisory for in-scope products and entities
- Train personnel to understand data requirements, fields and perform necessary checks on the prepared DS-OL files
- · Monitoring to ensure data is consistently reported across different regulatory reports



- Examine all trade execution process flows related to equities traded in SEHK
- Correctly tag the orders as agency or principal, especially when the capacity is altered as the order crosses multiple entities
- Business management to project manage and coordinate the business requirements documentation, roll out and UAT testing of the DS-OL solution



Tax

· Assess the implications of capacity in which an LC acts in a trade on the stamp duty and transfer pricing



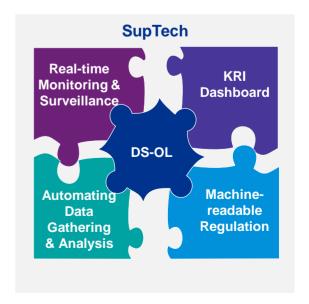
# DS-OL - Part of a Bigger Puzzle?

With increasing volume and complexity of trade data, SFC has prioritized the use of SupTech in its inspections to identify irregularities, systemic controls deficiencies and significant compliance issues which would otherwise go undetected.

With DS-OL, SFC aims to enhance its ability to conduct data analysis in order to detect trading-related control deficiencies and instances of non-compliance with the Code of Conduct.

In-scope brokers are required to submit the requested data in DS-OL format via SFC's WINGS platform, which also serves as a common submission platform for the LCs to submit other requested information relating to short positions, financial returns, key risk indicators (KRIs), etc.

Note 1: SFC and MAS are scaling up Data SME resources considerably and have established respective Data Analytics Groups to drive insights from firms' unstructured data.





# How We Can Help You In This Journey

Having worked on the implementation of similar regulatory requirements (CAT, MiFID, OATS) we have a strong pool of technical experts who will not just assist you in complying with DS-OL but also help you in assessing its impact on your business, technology and operations. In relation to DS-OL, we assisted one of the industry bodies in gathering thematic feedback from several industry participants in Hong Kong and as a result we understand the expectations of the regulator and are fully aware of the challenges that an In-Scope brokers may face in view of implementing a DS-OL solution.



## **Data Standards for Order Life Cycle**











#### Understand and Breakdown DS-OL

- Plain English decomposition and summary of regulatory text
- Summarise business requirements to support end-to-end traceability and requirements definition
- Review regulatory updates and provide interpretative advice leveraging KPMG SMEs.

# Assess your current readiness of DS-OL

- Assess the current state (systems, processes and governance) in the context of DS-OL readiness and identify areas of work/improvement
- Assist you in identifying the necessary data sources and be able to demonstrate that the full population of required events and related fields are collected

#### Improve Your Data Management and Controls

- KPMG can help assess your capabilities in the areas of data, controls, governance and oversight.
- We can help determine what data should be collected and how to ensure that data is captured the right way, what processes and controls should be in place, and how to monitor and interpret complex technical specifications under DS-OL

## Develop a Target Operating Model

- Assist you with the development of a Target Operating Model with dimensions including organisation and governance, processes, controls, people, technology & data
- Help you develop roadmaps for the implementation of DS-OL compliant solution

#### **Review and Test**

- Provide different scenarios to help you understand and test different data/fields requirements related to order events and trade flows
- Perform postimplementation review with a focus on process and control, completeness, accuracy and timeliness of data being prepared for DS-OL compliance

# **Programme Management and Operational Planning**

- Provide program mobilisation and support, including governance, detailed project planning, solution delivery and resource management.
- Develop policies and procedures to enable full compliance to DS-OL on an ongoing basis.



#### **Build a Scalable Solution**

With the massive data requirements under DS-OL, LCs should consider embracing new opportunities in technology such as data management practices and cloud-based infrastructure and platform provisioning, which can allow the strategic use of data for competitive advantage. KPMG has the experience and proven methodologies and tools that will help you build a solution not only for DS-OL but could also support other reporting and analytics requirements.



We are strongly committed to working with our clients in delivering quality and excellence in:

### 1 Regulatory Reporting Expertise

KPMG's global team consistently works together to deliver complex global regulatory reporting assessments, program reviews, report testing and data quality checks enabling efficient, coordinated and consistent execution for its clients. We have tools and accelerators that quickly assess completeness and accuracy of reporting and the governance and control frameworks necessary to assess and maintain sustainable programs.

### 3 Data Governance and Engineering Knowledge

In Hong Kong, KPMG has a team of experienced data and analytics professionals who understand the trade life cycle and have the technical skills to design, build and test a workflow to produce and verify the output necessary for the regulatory reporting standards.

#### 2 Relevant Global Experience

KPMG specialises in securities, options and swaps transaction and position reporting and is assisting firms in the US with CAT implementation and readiness testing. KPMG provided a hands-on technology focused regulatory driven transformation team to support the client's MiFID II project from interpretation of regulations through to solution delivery comprising data lineage maps, data quality management and testing planning and implementation of controls framework.

### 4 Industry Insight

KPMG works closely with the regulators in Hong Kong on outsourcing, technology risk management and cyber security requirements. Our practice brings together former regulators and industry professionals as well as individuals with specialized IT/Data experience to provide a broad scope of related services. In addition, KPMG worked alongside an industry body to consolidate and analysed industry response to DS-OI.

# 5 Our Tools and Methodologies

KPMG offers a wide range of services and solutions covering various data management pillars across the full useful life of data supply chain. Our Referential DQ rules have been implemented to improve the reference data quality, data lineage stitching methodology has been used to accelerate lineage efforts on four different levels; IT application level, process level, data flow level and data directory level in addition to our data quality and management tools that have been used to determine critical data elements and build data governance, meta data management and workflow functionality.





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