Modernising the Listed Derivatives Workflow: A Blueprint for Change

November 2, 2021
Message from Walt Lukken, President and CEO of FIA

Dear Members of FIA and our Industry—

When Covid abruptly shut down the world economy in March 2020, the global futures and options markets experienced record trading activity and extreme volatility. Our markets worked well and were able to handle this enormous stress. However, it exposed several long-standing bottlenecks in the trading and clearing infrastructure that must be addressed.

As a result, FIA embarked on an initiative to review our post-trade settlement process. FIA engaged with its global committees to study lessons learned, created an industry Taskforce, and hired JDX Consulting to gather the views of global exchanges, clearinghouses, vendors, and customers. This consensus-driven approach has led us to the release of today’s Blueprint.

The Blueprint —authored by JDX —is based on interviews with 25 firms and more than 60 industry participants in various roles. The Blueprint makes several recommendations aimed at making our industry more efficient.

The Blueprint recommends:

• Forming an independent Markets Standards Body (MSB) to oversee the development of certain market standards and best practices in the trade and clearing lifecycle
• The standards body have proper governance that broadly represents industry stakeholders with its deliberations open and transparent to the marketplace
• The standards body adopt a consensus-driven agenda that is developed and supported broadly by the industry

Now is the time for action. FIA will be working with its Taskforce and other market stakeholders in the coming weeks and months to consider these recommendations and build support for this initiative.

I encourage you to read the attached Blueprint or visit FIA.org to learn more about how you can get involved.

Sincerely,
Walt Lukken
Executive Summary

- JDX Consulting was engaged in September 2021 to work with the FIA and its industry-wide Taskforce on Standards to investigate whether the adoption of industry standards would be benefitted by the creation of an independent, collaborative, open-source standards body to provide long-term value to market participants.

- Views and opinions were sought from 25 organisations and more than 60 people representing a diverse cross-section of the market segments and roles that make up the listed derivatives ecosystem.

- It is clear that the collaborative work over the past year has been successful in driving consensus on the need for common standards of data, process and protocol. Developing these standards will not be easy, but the real challenge will be one of encouraging adoption of those standards by the diverse industry participants.

- Largely the participants agree that there is a need for an independent markets standards body that encourages collaboration and adoption of standardised recommendations. Participants felt that for this body to be successful it should be a distinct entity and must work with its members to address 4 critical success factors:

  1. The right level of senior commitment from its members
  2. An effective governance and communications construct
  3. A meaningful agenda that reflects the priorities of its members
  4. The necessary resources to deliver

- This report sets out the blueprint for the conditions of success for an independent markets standards body and is supported by recommendations about how to launch, substantiate and operationalise the body. It is recommended that alongside the current focus on give-up, allocation and average pricing processes, adoption will be encouraged with the drafting of:

  - Full industry front to back workflow model
  - Quantification of costs and risks borne by current processes
  - Agreement on common metrics to be reported by parties
Project Background

Context
Reflecting on the experience of a severe backlog of unallocated/misallocated trades in March 2020, FIA wants to create an industry that is more effective, resilient, competitive, and innovative for all sectors and participants in the listed derivatives markets.

FIA wants to improve processes to create “effective fire prevention rather than effective firefighting” that will help the listed derivatives industry migrate to a more efficient and resilient operating environment while complying with regulatory obligations. This exercise must meet these objectives and ensure the industry is set up to support immediate and visionary change with meaningful impact for all stakeholders.

Objective
FIA wants to test the hypothesis that trade and clearing standards developed by the industry and housed in a new industry-governed standards body will be an effective means of transforming the industry through gaining the participation and confidence of all sectors in adopting common processes, data and technology standards with which to transform pre-, at, and post-trade data, lifecycle events and workflows.

JDX Mandate
JDX Consulting was asked to:

- Execute a series of one-to-one interview workshops with a representative sample of industry stakeholders; and
- Create a report ahead of Expo that acts as a functional blueprint for the industry to develop standards of best practice and includes recommendations for an approach to lead and coordinate the development and adoption of those standards.

Contributors

<table>
<thead>
<tr>
<th>Clients (Buy Side)</th>
<th>Executing &amp; Clearing Brokers</th>
<th>Exchanges &amp; CCPs</th>
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<tbody>
<tr>
<td>4 Firms 6 Participants</td>
<td>7 Firms 29 Participants</td>
<td>5 Firms 7 Participants</td>
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<tr>
<th>Trade Associations</th>
<th>Vendors</th>
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<tr>
<td>2 TAs 5 Participants</td>
<td>7 Firms 16 Participants</td>
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NB: Excludes FIA

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March 2020: Record Trading Activity Triggered Processing Bottlenecks

2020 Daily Contract Volumes Allocated on Trade Date versus Contracts Not Allocated on Trade Date

Record volumes lead to 15 times more contracts not allocated on trade date.

Even routine spikes in volumes have led to non-allocated trades and backlogs. Interviews indicate that firms allocate extra resources during these periods of heightened operational risk and inefficient manual processing.

March 2020
FIA meets to coordinate the firefight

June 2020
FIA meets to lead lessons learned exercise

November 2020
FIA annual planning session prioritises agenda

December 2020
FIA creates Board-level Committee on Standards

2021 Industry Taskforce formed

Data Source: FIA Tech. As no comprehensive global source of this data exists, we present a proxy of consolidated reporting by exchange and CCP members of FIA Tech Atlantis.

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Market participants reported **sustained high volatility and unprecedented trading volumes** of up to 5 times average daily volumes in February and March 2020. The majority of those interviewed reported **no technology outages or throughput challenges**. Instead, the problems observed were systemic across the listed derivatives workflow. COVID-19 proved to be a catalyst, but not the root cause, of the challenges observed.

**Observed Challenges**

### Observations
- **Manual processing on T+** leading to snowball effect on backlog and stressed workforce increasing systemic risk
  - EB and FCM hold trades on suspense accounts carrying **risk, margin and cost**
  - Fair allocation / average pricing methodologies become systemic requirement, but lacks standardisation
- **Standards are not adopted,** further fragmentation
- **Myopic view** on one part of process. Cannot compare relative performance
- **Healthy competition has led to increase in market participants, each with different and siloed processes / systems**
  - Unique, in-house requirements driven by client demand
- **Covid-19 Pandemic**
  - **High volatility**
  - **Catalyst**
  - **High volumes**

### Challenges
- **Market dynamics**: shift from full-service brokers to multiple liquidity providers and FCMs
  - Rise of the big asset managers, **trading on block**, where fair allocation is critical
  - Lots of positive discussion and momentum but **no consistent action**
  - Poor **visibility and transparency**
  - **End-of-day execution and allocation** may cause congestion
  - Extended allocation windows have knock-on effects
  - Differing standards leading to certain FCMs having difficulties accepting give-ups

COVID-19 proved to be a catalyst, but not the root cause, of the challenges observed.
The Systemic Challenge of a Fragmented Workflow

Market participants commented that there has been a piecemeal evolution of the exchange-traded derivatives workflow over the past 30 years. Individual firms have made efforts to drive in-house standardisation to align their own processes, data and technology to drive operational excellence, and reduce cost and risk. As a result, processes are neither standard across the ecosystem nor within peer groups. The industry operates using a complex fragmented workflow with multiple potential points of failure and differing commercial dynamics between parties.

Exchanges
- Execution Fills
- Middle Office Platforms
- Back Office Books & Records

Executing Brokers
- Middle Office Platforms

CCPs
- Clearing Gateways
- Middle Office Platforms

Clearing Brokers
- Middle Office Platforms

Clients
- OMS / EMS / Allocation Platforms

Vendor: 'The best tool for improvement is root cause analysis'

EB: 'The chain is extremely fragmented'

EB & CB: 'No one has documented a full E2E workflow'

CB: 'We invest in a multitude of middle-ware to support the variety of translation needs'

Clients: 'There’s a lack of incentive to fix other pieces of the chain'

CCPs: 'We will adopt standards if our FCMs ask us to'

 Clients: 'Our FCMs have varying standards we need to adapt to'

EB: 'We receive allocations at the end of the day'

CB: 'We cannot accept trades until we’ve received allocation instructions from the client'

EB & CB: 'We carry risk, margin and cost of unallocated trades'

EB & CB: 'The industry needs to realise it is one huge ecosystem but with a subset of different, smaller ecosystems and each one has their own way of doing things'

This is a single simplistic representation of the workflow: it does not reveal the full map of potential points of failure and the dynamics between participants.
Critical Juncture – Call for Action

Why Now?

1. Based on the feedback received to date, the industry is at a critical juncture to define and adopt common data, process and protocol standards.

2. COVID-19 proved to be a catalyst, not the root cause, revealing a number of underlying issues with the fragmented legacy ecosystem across participants, processes, data and technologies.

3. Market participants agree there is no commercial advantage to organisations developing and maintaining standards separately. Current processes are not scalable and will potentially (i) inhibit innovation; and (ii) increase operational risks and costs.

4. Over time, the sharp pain felt in March 2020 will become a dull memory, but the systemic issues with the post-trade ecosystem will continue to exist, and flare up periodically. It is critical that we use this opportunity to secure the support to transform the listed derivatives industry now.
Conditions for Success: Develop Collective Trust

Market participants have identified three elements to develop the necessary trust for successful collaborative development and adoption of market standards:

**COMMITMENT**
- Senior sponsorship
- Funding and SME resources
- Incentivisation

**GOVERNANCE**
- Manageable executive committee
- Industry-wide representation
- Meaningful agenda

**ACCOUNTABILITY**
- Transparency
- Measurement
- Reliability

‘Everyone needs to feel represented’
‘We need the right skill sets around the table’
‘Leave egos at the door’
‘No-one will adopt standards if we don’t fix incentives – this enforces the right behaviour’
‘The more complexity in the industry, the more we pay for it’
‘Some participants didn’t feel the pain’
‘We must be vendor agnostic, and facilitate open-source competition’

‘Our voices must be heard’
‘We need to focus on smaller tangible deliveries to gain trust and credibility’
‘When smart folk come up with solutions, they do so in a way that is open access’
‘We need full visibility of the chain, and to be working to the same scorecard’
‘If we build the next chapter together, we will all win by creating extra capacity and demand for listed products’
Recommendations

To enable the industry to collectively tackle the challenges highlighted, and move forward in unison, we propose three recommendations.

1. Form a Markets Standards Body

   Recommendation 1:
   Form a Markets Standards Body
   To achieve success, the recommendation for codes of conduct, open access limits (Standards body initial vision to teach the market
   standards better integration, integration leading to an improved view of a standard
   process.
   We already have the right
   ingredients: common
goals, measurable
   metrics, and the will &
   interest of industry
   participants.

   1. Commitment
      • Industry Outreach
      • Quality for risks and costs
      • Demand and relevance
      • Accountability & Governance

   2. Accountability
      • Establish industry metrics
      • Agreement on transparency
      • Establish mechanisms for
        encourage adoption and
        involvement.

   MSB

   Global Fixed ETD and OTC clearing

2. Develop a Collaborative & Meaningful Agenda

   Recommendation 2:
   Develop a Collaborative & Meaningful Agenda
   To enable the industry to collectively tackle the challenges highlighted, and move forward in unison, we propose three recommendations.

   Priority
   Opportunity
   Objective
   Benefit Statement
   1. Trade-allocating process
   2. Trade-give-up process
   3. Average-pricing methodology
   Future Areas of Focus

   Industry protocol
   Trade liquidity
   Performance
   Industry protocol

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3. Establish an Industry Call to Action Roadmap

   Recommendation 3:
   Establish an Industry Call to Action Roadmap
   The industry needs to rally around this call to action to develop a collaborative framework and agenda. JDX can drive a representative governance structure, make the case to the industry and secure early adopters and enthusiasts to optimize the success of this initiative proceeding.

   Call to Action: Governance
   Call to Action: Industry
   Call to Action: Participants
Recommendation 1: Form a Markets Standards Body

To achieve success, the recommendation is to create an independent, open-access Markets Standards Body (MSB) designed to meet the criteria to encourage further cross-industry engagement leading to widespread adoption of standards of best practice.

**COMMITMENT**
- Industry Outreach
- Quantify the risks and costs
- Document the end-to-end workflow

**GOVERNANCE**
- Participation Agreement
- Code of Conduct
- Consultation Papers

**ACCOUNTABILITY**
- Establish industry metrics
- Agree level of transparency
- Establish mechanism to encourage adoption and implementation

‘We already have the right ingredients: **common objectives**, **available metrics**, and the **will & interest** of industry participants.

We now need the right institutional structure to **create and optimise our chances of success**, without which we may make progress but lose momentum.’

Global Head ETD and OTC clearing
**Develop a Collaborative & Meaningful Agenda**

Based on the output of various FIA global committees over the past year, JDX confirms majority consensus on these initial recommended priorities for the Markets Standards Body. Focus on them will lead to an improvement in the timeliness of trades clearing into the correct end account on top-day and reconciling with the CCP.

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<thead>
<tr>
<th>Priority</th>
<th>Opportunity</th>
<th>Objectives</th>
<th>Benefit Statement</th>
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<tbody>
<tr>
<td>1. Trade allocation process</td>
<td>Streamline and create standards and consistency across the industry</td>
<td>Reduce operational workload and operational risk. Better provision of trade status data.</td>
<td>Allocations sent in a timely manner will benefit the entire ecosystem from a cost and risk perspective</td>
</tr>
<tr>
<td>2. Trade give-up process</td>
<td>Reduce complexity since there are multiple give-up possibilities at CCPs and various settlement timings / windows</td>
<td>Agree on give-up standards and practices, outline clearing closing times and identify areas to harmonise</td>
<td>Enable a better understanding of settlement time flexibilities and increase transparency</td>
</tr>
<tr>
<td>3. Average pricing methodologies</td>
<td>Allows fair and equitable allocations by those managing multiple accounts</td>
<td>Agreed general framework on the design and implementation of APS models resulting in fewer variations in functionality across market participants</td>
<td>Remove complexity for brokers and clients to allocate trades using average pricing allocations, reducing reconciliation issues and trade breaks</td>
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</table>

**Future Areas of Focus**

<table>
<thead>
<tr>
<th>Industry metrics</th>
<th>Trade messaging protocols and APIs</th>
<th>Vendor interoperability</th>
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<tr>
<td>Trade reference data</td>
<td>Pre-trade activities</td>
<td>Porting</td>
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<tr>
<td>Client reference data</td>
<td>Real-time processing</td>
<td>Margin operations and collateral management</td>
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Recommendation 3: Establish an Industry Call to Action Roadmap

The industry must feel included in this call to action in developing a Markets Standards Body and agenda. FIA must create a representative governance structure, make the case to the industry and secure early adopters and champions to optimise the chances of this initiative succeeding.

Getting Governance Right:

The Markets Standards Body must have a governance structure that is open and representative of the industry to encourage broad adoption of the developed standards.

Get Involved and Learn:

The industry must be educated on the benefits and cost savings of such an initiative. FIA’s development of its operations and standards webpage at FIA.org will encourage market participants to get involved.

Recruiting Champions:

It is important to cultivate early adopters and champions that are influencers for the broader marketplace. Visit FIA.org for more information on how to participate.

Launch

Create Governance Structure

Educate Industry

Commitment of Participants

We anticipate FIA outreach to secure early adopters and champions, and incrementally commit interest from broader industry participants.

FIA Conference
Boca Raton

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Markets Standards Body in Action

A Markets Standards Body would operate five phases from idea origination through to the execution and adoption of industry standards.

1. **Open Idea Origination**
   - An industry participant proposes an idea to MSB for analysis and development.
   - The submission process is designed in an open manner to allow any group/entity in the industry to propose and develop standards for approval.
   - The governance body at the MSB, comprised of representative market participants, reviews and prioritises analysis into the proposal.

2. **Analysis & Prioritisation**
   - MSB performs an initial analysis and notifies relevant market participants, such as CCPs, exchanges, executing brokers, clearing brokers, buy-side firms and vendors, of intentions of the newly proposed standard.
   - MSB invites the relevant participants to form a working group to provide analysis in the discovery phase.

3. **Business Case**
   - MSB consolidates the working groups’ analyses to form a well-articulated draft proposal and business case for the new standard.
   - MSB presents the draft standard and business case to the representative governance committee.
   - Governance committee ratifies that the draft proposal meets threshold criteria for implementing a new, effective and valuable standard.

4. **Proposal & Open-Source Consultation**
   - On agreement of the governance committee, a consultation period is established.
   - The draft standard and business case is published inviting comment from the whole industry.
   - MSB seeks commitment of relevant market participants in support of execution.

5. **Adoption & Monitoring**
   - MSB publishes the new standard following post-consultation refinement.
   - MSB provides on-going coordination, governance and transparency across the industry regarding the adoption of the new standard.
   - MSB provides regular updates on status, progress and any associated risks and issues.

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