

Evolution in the Operation, Governance and Business Models of Exchanges: Regulatory Implications and Good Practices

Consultation Report



**The Board
OF THE
INTERNATIONAL ORGANIZATION OF SECURITIES COMMISSIONS**

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Executive summary

Exchanges are the lynchpins of the financial system; they are the organized marketplaces through which most equities (as well as many other financial instruments¹) are traded. Consequently, how exchanges are organized and run is of critical interest to regulators – both with respect to how exchanges operate and the effect of the exchanges’ operations on the wider financial market. The transformation of exchanges from mutual ownership to for-profit entities, known as demutualization, has contributed to increased competition, technological advancements, and the emergence of new types of trading venues². In addition to their traditional market functions, most exchanges now also engage in other diverse activities such as data services and technology provision.

The Report focuses on equity exchanges but may be of relevance to other types of trading venues and trading in other classes of financial instruments. In particular, this Report:

- describes and analyses the changes in the structure and organization of exchanges and, in particular, their business models and ownership structure;
- outlines the impact of these changes on market structure, emphasizing the shift from traditional models to more competitive, cross-border, and diversified operations, whereby exchanges have become part of larger corporate groups, leading to resource-sharing and process consolidation;
- discusses regulatory considerations and potential risks and challenges, exploring: (i) the organization of individual exchanges and Exchange Groups, noting the adoption of matrix structures and potential conflicts of interest; (ii) the supervision of Multinational Exchange Groups; and (iii) the potential challenges of supervising individual exchanges within Exchange Groups; and
- outlines good practices that regulators may consider in the supervision of exchanges, particularly when they provide multiple services and/or are part of an Exchange Group.

¹ E.g., ETFs, bonds, derivatives.

² For the purpose of this Report, the term “trading venue” is generally defined as exchanges or other multilateral trading facilities, including, for example, alternative trading systems (ATSS) and multilateral trading facilities (MTFs). We recognize, however, that the concept of a “trading venue” is evolving in several IOSCO member jurisdictions. For example, the concept may, at the discretion of individual members for their jurisdictions, also include swap execution facilities (SEFs) or the European “organized trading facilities” (OTFs). However, for this project, a “trading venue” does not include a single dealer system or a broker crossing facility.

In particular, looking at the regulatory requirements and supervisory arrangements currently in place across IOSCO jurisdictions to help to ensure that exchanges are properly run, and considering the existing IOSCO Principles on secondary markets³, this Report proposes six good practices that regulators may consider.

They cover three specific areas, namely the: (1) Organization of Exchanges and Exchange Groups, (2) Supervision of Exchanges and other Trading Venues within Exchange Groups and (3) Supervision of Multinational Exchange Groups.

For each of these topics, the good practices are also complemented by a non-exhaustive list of the supervisory tools currently used in IOSCO jurisdictions to address the issues under discussion, which may serve as examples to other regulators in adapting the good practices in their respective jurisdictions. However, these “toolkits” are examples only and do not exhaust the way the proposed good practices can be implemented in each jurisdiction.

Regulators could consider adopting the following **six good practices**:

Organization of Exchanges and Exchange Groups

1. Assessing the organizational structure of the exchanges under regulators’ supervision in order to ensure that decision-making autonomy and independence regarding the discharge of exchanges’ regulatory obligations including ensuring market integrity practices and controls are maintained at the level of the individual exchange, subject to domestic legal and regulatory requirements and regulatory discretion, even if the exchange is part of an Exchange Group;
2. Assessing whether exchanges under regulators’ supervision have put in place arrangements and policies to ensure that the exchanges operate in compliance with their respective regulatory obligations. In particular, assessing whether individual exchanges, which are part of an Exchange Group, have sufficient expertise and knowledge on their own, to remain in control of any decision-making related to regulatory compliance;
3. Assessing whether there are any potential conflicts of interest that may arise due to exchanges being part of an Exchange Group and in managing its commercial interest and regulatory obligations;

Supervision of Exchanges and other Trading Venues within Exchange Groups

4. Assessing whether exchanges under their supervision establish effective arrangements for market operations, including conflicts of interest management, corporate and operational governance, and promoting transparency of trading. Regardless of the nature, size, or complexity of the trading venue, it is important that regulators consider monitoring whether

³ Please see in particular Principles 33-35, IOSCO Objectives and Principles of Securities Regulation, May 2017.

supervised exchanges have in place processes to deal with the evolution of their corporate structure and the potential conflicts of interest arising from it;

Supervision of Multinational Exchange Groups

5. Having regard to domestic legal and regulatory requirements, making use of mechanisms such as ad hoc cooperation, MOUs, supervisory colleges, and regulatory networks as considered under previous IOSCO reports, to facilitate and support supervision and supervisory cooperation; and
6. Monitoring developments in the structure and ownership of the exchanges and Multinational Exchange Groups to ensure that they continue to have the ability to supervise exchanges adequately and trading venues that operate in their jurisdictions.

Chapter 1 - Introduction

1. Background

Exchanges are the lynchpins of the financial system; they are the organized marketplaces through which most equities (as well as many other financial instruments) are traded. Consequently, how exchanges are organized and run is of critical interest to regulators – both with respect to how the exchanges operate and the effect of the exchanges’ operations on the wider financial market. The fair and efficient functioning of exchanges help maintain liquidity and facilitate price discovery, which in turn support the raising of capital for the real economy and the investment of savings by investors. This paper focuses on equity exchanges but may be of relevance to other types of trading venues and markets trading in other classes of financial instruments.

IOSCO Principles 33-35⁴ set out the importance of appropriate supervisory arrangements to facilitate the effective operation of exchanges and trading systems, with a view to maintain the integrity of the secondary markets both at the stage of authorisation and throughout the ongoing operation of the exchange.

In recent years, there have been significant changes in the business models of exchanges and the structure of secondary markets, including the emergence of new types of trading venues. In many cases, the business models of exchanges have evolved in response to market competition and technological and market developments. In particular:

- **Governance:** The governance of exchanges has evolved, in some cases as a result of demutualization and their increasing commercial function. As a result, regulators have sought

⁴ IOSCO Objectives and Principles of Securities Regulation, May 2017.

to preserve the independence of exchanges' regulatory functions and responsibilities. In some cases, exchanges have become part of larger corporate groups, leading to the combining of resources and processes across the different entities, which may include other exchanges and trading venues belonging to the same group.

- **Interconnections, consolidation and cross-border activity:** Over time, in some jurisdictions, the cross-border activity and interconnection of exchanges have increased. In particular, in some areas, groups have acquired other entities and now operate exchanges and other trading venues in a number of jurisdictions, which has increased interconnectedness across jurisdictions.
- **New business lines:** Many exchanges – either individually or through affiliates – have expanded their activities, for example, into selling data services or providing technology services.

This Report describes and analyses the changes in the structure and organization of exchanges and, in particular, the business models of exchanges and their ownership structure.

To support the analysis in this Report, two rounds of surveys were conducted. One between November 2022 and January 2023, and another between June and July 2023. The purpose of these surveys was to gather information on recent developments from a regulatory and supervisory standpoint. The areas covered included the business lines, governance and cross-border operation of exchanges; changes in the regulatory perimeter; and the impact of fragmentation, technology and digitalisation. The survey also sought information on the legislative and regulatory requirements and supervisory approaches adopted by regulators in the regulation and supervision of exchanges and Exchange Groups.

Annex A to this Report contains a list of 27 IOSCO regulatory authorities (from 25 jurisdictions) and six industry representatives that completed the surveys.

Annex B to this Report presents the previous relevant IOSCO work and recommendations.

2. Key Concepts/Glossary

For purposes of this Report:

- “Exchange Group” means a group of entities, including an exchange or exchanges, operating under common ownership or management. An Exchange Group may operate different exchanges or other trading venues for different types of financial instruments (such as stocks, bonds, futures, and options) and may operate different entities for other services (such as clearing, settlement, data, and technology).

- “International” or “Multinational Exchange Groups” are Exchange Groups that operate in multiple jurisdictions; “Domestic Exchange Groups” operate only in one jurisdiction.

Chapter 2 – Market Evolutions

1. Demutualization of exchanges and factors of exchanges’ evolutions

In the past, exchanges were mutually owned and operated by their members, including traders, brokers, and market makers. In the last two decades many exchanges have demutualized⁵, resulting in exchanges becoming for-profit companies no longer owned and operated by their members. Today, most major exchanges are publicly traded or privately owned companies. In some jurisdictions, regardless of the change in ownership structure, exchanges continue to be self-regulatory organizations.

Exchanges’ transition to for-profit business models and increased competition have incentivised exchanges to expand their activities, as well as their cross-border presence and affiliations. The following factors may have also contributed to these developments:

- the focus on lowering costs, which may have impacted revenues and incentivised exchanges to pursue new business strategies. In particular, to diversify their revenues streams, some exchanges have expanded their business lines, including directly providing technology services (in terms of connectivity services, provision of trading platforms to third parties, etc.) and/or other ancillary services to their members, participants and/or other trading venues. Another factor may have been the desire to mitigate financial risks that could result from reliance on a single activity;
- in certain instances, the development of a mergers and acquisitions (M&A) strategy – through the acquisition of other (domestic and/or foreign) entities – and the consequent optimisation of IT systems and services and human resources. In some instances, this has been achieved through the development of common trading platforms across different exchanges and/or trading venues operated by the same Exchange Group;

⁵ Most IOSCO jurisdictions surveyed have demutualized exchanges (i.e. Australia, Brazil, Canada, France, Hong Kong, Italy, Kuwait, Malaysia, Netherlands, Romania, Singapore, Spain, Sweden, Turkey, UK, U.S.). Some jurisdictions have both mutually owned and demutualized exchanges (China, Japan, Mexico, Switzerland).

- increased competition, which has developed in some jurisdictions partly as a result of changes in the legal framework governing the trading venue perimeter⁶. Exchanges face competition from new types of trading venues. In addition, exchanges compete with new entrants from other sectors (such as tech companies);
- technological advancements and the employment of new technologies in the markets and, in particular, the exponential expansion of electronic trading.

2. Multiple business lines

What constitutes the core business of an exchange may be different across IOSCO members⁷. However, it is generally considered that functions relating to the listing and trading of financial instruments, the provision of certain market data and self-regulatory functions are core functions of an exchange. Due to the factors listed above, in recent years, many exchanges and/or their affiliates have started to diversify their business lines. Depending on the jurisdiction, business lines (other than the core functions) may be integrated into the same entity managing the exchange. Alternatively, they may be segregated in a separate entity belonging to the same Exchange Group (in some cases, this separation is required by the applicable legal framework).

Many respondents to the surveys highlighted that exchanges within their jurisdictions have started to pursue other activities, such as technological services related to market data or exchange operations.

⁶ For example, the MiFID II framework in Europe.

⁷ In this respect, the IOSCO Principles for Secondary and Other Markets in the Objectives and Principles of Securities Regulation identify a set of specific requirements for markets' regulation, including the establishment of exchanges (Principle 33), ongoing oversight of exchanges and trading systems (Principle 34), promotion of transparency of trading (Principle 35), and detection of manipulation and unfair trading practices (Principle 36). Moreover, the 2006 Report discussed the "Roles of an exchange", stating that "*Exchanges have traditionally performed important roles as regulators, making and enforcing rules for a range of market activities. Exchanges' core areas of regulation include rule-making in respect of members/participants, the products admitted to trading and the trading itself. Some exchanges also have regulatory or quasi-regulatory functions in respect of a number of other market services, including clearing and settlement.*" The Report also lists the full set of these responsibilities, including "*member regulation*", "*product regulation/listing*", "*trading regulation*" and "*other functions*". With respect to the latter, the same Report recognises that "*An exchange may provide certain services beyond traditional trading services for which it may in some cases act as rule-setter or in a quasi-regulatory role. Although this may be the case whether or not an exchange is demutualized, often the change to a for-profit structure is a motivating factor behind an exchange's focus on developing non-trading services. These services may include, for example, transfer agency, custodian, clearing and settlement, shareholder registry and data distribution services*".

These activities may be conducted by the exchange or by an affiliate within the same Exchange Group. Quantitative data from some survey respondents indicated that revenue derived from other functions have steadily increased and, in the case of some exchanges, this increase was described as significant.

For example, one survey respondent reported that in an Exchange Group headquartered in its jurisdiction, revenue from market data services increased by more than 100% in the past five years. Another respondent observed an increase of over 43% between 2018 and 2021. Revenues from market data distribution services, connectivity, and indices grew by nearly 60% from 2017 to 2022 on one exchange in another jurisdiction that responded to the survey. Only a few jurisdictions reported that revenues from other functions remained stable in recent years.

In many jurisdictions, the provision of certain types of market data and related products are regulated activities. In these jurisdictions, market data and related products have been subject to regulatory obligations regarding, amongst other things, their provision to the public, format for disclosure and aggregation over time. In 2022, IOSCO published a report discussing the recent trends in the provision of market data and the underlying regulatory frameworks, which vary among jurisdictions.⁸

For example, in the U.S., the provision of market data (by exchanges and other trading venues) is subject to regulatory requirements, including those related to the collection, consolidation and dissemination of certain pre- and post-trade data and the fees assessed for market data. In Europe⁹, the MiFID/R II framework also regulates the provision of market data. Particularly, it requires market operators and investment firms operating trading venues to make available pre- and post-trade information on a reasonable commercial basis and to ensure non-discriminatory access.

Other activities that are gaining increasing relevance within some Exchange Groups are technological services, which include hosting and connectivity services. The IOSCO Report on Market Data in the Secondary Equity Market described that hosting and connectivity services provided by trading venues are important to ensure fair access to market data¹⁰. However, these functions may not fall under financial markets regulation in all IOSCO jurisdictions. Other activities mentioned by survey respondents included the creation of new indices/benchmarks, as well as post-trade services.

Another trend that has emerged in some instances is the use of a common trading platform (i.e. the use of the same matching engine technology and/or same software) by multiple exchanges or trading

⁸ <https://www.iosco.org/library/pubdocs/pdf/IOSCOPD703.pdf>

⁹ Meaning the EU and the UK.

¹⁰ “Fair access to market data is an important consideration in the provision of market data to market participants. Fair access may cover issues including market data pricing, connectivity terms and pricing, and contractual arrangements.”

venues belonging to the same Exchange Group. This development may have incentivized organizational changes across the various entities, most notably the centralization of IT and market surveillance resources devoted to the management of the common trading platform.

In Brazil, for example, the demutualization of the exchange in 2007 facilitated the expansion of other functions carried out by the exchange, as described in **Table 1** below. Similarly, in Switzerland a sub-holding structure was established at the end of 2022 to attract investors. In Spain, the business model of a supervised market operator - now integrated within a broader Exchange Group - has increased the profits originating from some activities, mainly market data but also technological services.

In Europe, changes in business models resulted in exchanges establishing new departments dedicated to those business lines, including at the group level. As part of this, specific group functions were established to coordinate business lines and, in some cases, centralize activities.

In the U.S., demutualization occurred many years ago, but the market structure continuously evolves because of new entrants and consolidation of the industry. Holding companies, which sometimes are also public companies, provide other functions through affiliates, such as technology services, in addition to operating registered exchanges.

Some jurisdictions surveyed explained that there have been no major changes to the organization or funding of trading venues since they became publicly listed companies many years ago. Other survey respondents reported changes or restructuring to the equity structure of the trading venue in recent years.

Furthermore, some Exchange Groups have entered into agreements with technology companies. For example, Deutsche Börse Group and Google Cloud announced a strategic partnership to accelerate innovation, and the London Stock Exchange Group and Microsoft launched a 10-year strategic partnership for next-generation data and analytics and cloud infrastructure solutions.

Responses to the surveys indicated that the increased importance of other functions, as described above, is related to:

- (i) increasing demand from market participants for better data, trading solutions and connectivity, as well as competitive pressures to lower fees and to provide higher liquidity and reliable information;
- (ii) technological developments such as the emergence of electronic trading platforms;
- (iii) regulatory developments, for example, in Europe with the implementation of the MiFID/R II and EMIR frameworks; and

- (iv) data and technology solutions which have high synergies with the core business and provide an opportunity to increase a trading venue's non-transactional revenues.

3. International business strategy and Multinational Exchange Groups

The trends described above, combined with the changes in ownership structure, have resulted in some exchanges pursuing an international business strategy. Consequently, some exchanges have become part of Multinational Exchange Groups.

One trend identified in some IOSCO jurisdictions is consolidation, whereby large Exchange Groups acquire smaller trading venues across different geographical regions. In some jurisdictions, there are many different trading venues available for the trading of equity financial instruments. However, they often operate under the umbrella of a few Exchange Groups, which may also operate in other jurisdictions. These may offer a range of trading functionalities and types of trading venues, and provide other types of financial and non-financial services through different entities within the group.

In Europe, the withdrawal of the United Kingdom (UK) from the European Union (EU) has been a contributing factor to the increased cross-border operation of exchanges and other types of trading venues in Europe. This trend includes, for example, the establishment of subsidiary trading venues from the UK in the European Union, and vice versa. Additionally, market operators from the U.S. have set up subsidiaries in the EU (mostly in the Netherlands, Ireland, and France) increasing Multinational Exchange Groups activity in the European Union.

Some examples of Multinational Exchange Groups with a diverse set of activities include:

- Intercontinental Exchange (ICE) Group: the ICE Group owns exchanges, including the NYSE and its affiliated exchanges and other trading venues as well as a number of central clearing houses across the globe;
- London Stock Exchange Group (LSEG): LSEG owns the London Stock Exchange as well as a number of companies in the areas of market data, benchmark administration and technological services. In 2021, LSEG completed the acquisition of Refinitiv, a worldwide provider of market data;
- Euronext Group (Euronext): Euronext currently owns several EU primary listing venues (Paris, Amsterdam, Brussels, Lisbon, Dublin, Milan, and Oslo) and entities that offer market data services, benchmarks, and post-trading infrastructures;

- Hong Kong Exchanges and Clearing Limited Group (HKEX): HKEX Group owns and operates several exchanges and central clearing houses in Hong Kong, the UK and Mainland China; and
- Nasdaq, Inc. (Nasdaq): Nasdaq owns and operates several exchanges primarily in the US and in the Nordic and Baltic regions of Europe. It also operates a CCP and CSDs in Europe and owns entities that provides trading, clearing and exchange technology as well as market data services and benchmark administration.

Please see **Table 1** below for a more comprehensive view.

Table 1 – List of major Exchange Groups

ULTIMATE PARENT COMPANY AREA	GROUP NAME	COUNTRIES WHERE THE GROUP OPERATES	BUSINESS LINES PERFORMED AT THE GROUP LEVEL	EQUITY TRADING VENUES IN THE GROUP
Asia – Pacific	Japan Stock Exchange	JP	<ul style="list-style-type: none"> ▪ Equity, Equity-like and Derivatives trading services; ▪ Global comprehensive financial and information platform (market data services and analytics). 	<ul style="list-style-type: none"> ▪ Tokyo Stock Exchange (“TSE”)
	ASX	AU	<ul style="list-style-type: none"> ▪ Trading Services; ▪ Connectivity and Data services (data analytics, feeds); ▪ Investment tools for investors (financial education tools, information tools); ▪ Corporate and issuers' services; ▪ Clearing and settlement services. 	<ul style="list-style-type: none"> ▪ Australian Securities Exchange (ASX)
	NSE Group	IN	<ul style="list-style-type: none"> ▪ Trading Services; ▪ Connectivity and Data services (data analytics, feeds); ▪ Investment tools for investors (financial education tools, information tools); ▪ Corporate and issuers' services; ▪ Clearing services. 	<ul style="list-style-type: none"> ▪ National Stock Exchange of India
	Hong Kong Exchanges and Clearing Limited	HKSAR GB China	<ul style="list-style-type: none"> ▪ Trading Services and related services; ▪ Market Data services and feeds, and data analytics; ▪ Corporate and issuers' services; ▪ Clearing services; ▪ Hosting services. 	<ul style="list-style-type: none"> ▪ Stock Exchange of Hong Kong ▪ Hong Kong Futures Exchange Limited ▪ London Metal Exchange ▪ Qianhai Mercantile Exchange
	SGX Group	SG	<ul style="list-style-type: none"> ▪ Trading Services; 	<ul style="list-style-type: none"> ▪ Singapore Exchange (SGX)

			<ul style="list-style-type: none"> ▪ Connectivity and Data services (data analytics, feeds); ▪ Investment tools for investors (financial education tools, information tools); ▪ Corporate and issuers' services; ▪ Clearing and settlement services. ▪ Depository services. 	
	Bursa Malaysia Berhad	MY	<ul style="list-style-type: none"> ▪ Trading Services; ▪ Connectivity, Data & Information Services; ▪ Corporate and issuers services; ▪ Clearing & Settlement services; ▪ Central depository services; ▪ Voluntary Carbon Market; ▪ Shariah Compliant Commodity Trading Platform; ▪ Electronic trading platform for bond market; ▪ Peer to peer financing platform. 	<ul style="list-style-type: none"> ▪ Bursa Malaysia Securities Bhd
Europe	Euronext	NL IT BE IE PT FR NO SG GB US	<ul style="list-style-type: none"> ▪ ENX Trading services, jointly with TV operations to support market participants; ▪ Post-trading services; ▪ Market Data and analytics; ▪ Corporate Services; ▪ News Feeds; ▪ Reference data (LEIs, ISINs, FISNs) assignment (NNA). 	<ul style="list-style-type: none"> ▪ Euronext Amsterdam ▪ Euronext Brussels ▪ Euronext Dublin ▪ Euronext Lisbon ▪ Euronext Milan ▪ Euronext Oslo ▪ Euronext Paris
	Deutsche Boerse Group	DE/EU HK SG CH	<ul style="list-style-type: none"> ▪ Trading Services and related ancillary services; ▪ Market Data services and feeds, and data analytics; 	<ul style="list-style-type: none"> ▪ Boerse Frankfurt ▪ Boerse Berlin ▪ Boerse Stuttgart ▪ Tradegate

		US GB	<ul style="list-style-type: none"> ▪ Fund processing and distribution; ▪ IT services related to financial services; ▪ Clearing and settlement services. 	<ul style="list-style-type: none"> ▪ Boerse Dusseldorf ▪ Boerse München ▪ Equiduct ▪ Nordic Growth Market ▪ BX Swiss
	SIX Group	CH ES/EU GB	<ul style="list-style-type: none"> ▪ Operation of market infrastructures; ▪ Market Data services, feeds, data analytics (financial information including reference data); ▪ Clearing and settlement services; ▪ Trade Repository; ▪ DRSP (EU ARM and APA); ▪ Banking Services (Payment Services). 	<ul style="list-style-type: none"> ▪ BME Group (Madrid Stock Exchange, Barcelona Stock Exchange, Bilbao Stock Exchange, Valencia Stock Exchange, and a common Spanish Interconnection System (SIB), BME MTF Equity and Latibex) ▪ SIX Swiss Exchange ▪ SIX Digital Exchange
	London Stock Exchange Group	GB NL/EU	<ul style="list-style-type: none"> ▪ Trading services (and related ancillary services); ▪ Market Data and Analytics, Statistics and Feeds; ▪ DRSP (EU ARM and APA). 	<ul style="list-style-type: none"> ▪ London Stock Exchange ▪ Turquoise ▪ AIM
	Aquis Exchange PLC	GB FR/EU	<ul style="list-style-type: none"> ▪ Trading services (and related ancillary services); ▪ Market Data and Analytics, Statistics and Feeds; ▪ Consultancy and Tech Services. 	<ul style="list-style-type: none"> ▪ Aquis Stock Exchange Limited ▪ Aquis Exchange Europe
Americas	CBOE Global Markets	NL GB US AU CA	<ul style="list-style-type: none"> ▪ Exchange operations and self-regulatory functions ▪ Trading services (and related ancillary services); ▪ Market Data and Analytics, Statistics and Feeds; ▪ EU Systematic Internaliser service; 	<ul style="list-style-type: none"> ▪ Cboe Australia Pty Limited ▪ Cboe Europe Limited ▪ Cboe Canada ▪ Cboe EDGX ▪ Cboe EDGA ▪ Cboe BYX ▪ Cboe BZX

			<ul style="list-style-type: none"> ▪ DRSP (EU APA). 	
Nasdaq, Inc.	US CA EE, LV, LT SE, NK, FI, IS AE	<ul style="list-style-type: none"> ▪ Exchange operations and self-regulatory obligations ▪ Trading services (and related ancillary services); ▪ Market Data and Analytics, Statistics and Feeds; ▪ Clearing and Settlement services; ▪ IT services (including an anti-financial crime services business); ▪ Regulatory reporting (EU Trade Repository, APA). 	<ul style="list-style-type: none"> ▪ Nasdaq ▪ Nasdaq BX ▪ Nasdaq PHLX ▪ Nasdaq Dubai ▪ Borse Dubai ▪ Nasdaq Stockholm ▪ Nasdaq Canada ▪ Nasdaq Copenhagen ▪ Nasdaq Helsinki ▪ Nasdaq Reykjavik ▪ Nasdaq Oslo ASA ▪ Nasdaq Riga ▪ Nasdaq Tallin ▪ Nasdaq Vilnius 	
ICE	GB NL/EU US SG AE	<ul style="list-style-type: none"> ▪ Exchange operations and self-regulatory obligations ▪ Trading Services and related ancillary services; ▪ Market Data services and feeds, and data analytics; ▪ Clearing services; ▪ Inter-Dealer Brokerage (Creditex). 	<ul style="list-style-type: none"> ▪ NYSE ▪ NYSE Arca ▪ NYSE American ▪ NYSE Chicago ▪ NYSE National 	
TMX Group	CA EU GB	<ul style="list-style-type: none"> ▪ Trading Services and related ancillary services; ▪ Market Data services and feeds, and data analytics; ▪ Corporate and issuers' services; ▪ Clearing services; ▪ Inter-Dealer Brokerage (Shorcan). 	<ul style="list-style-type: none"> ▪ Toronto Stock Exchange ▪ TSX Venture Exchange ▪ TSX Alpha Exchange 	
B3 Group	BR	<ul style="list-style-type: none"> ▪ Trading services and related ancillary services; ▪ Market Data services and data analytics; ▪ Clearing and Settlement services (CCP and SSS); ▪ Central Securities Depository (CSD); ▪ Trade repository (TR); 	<ul style="list-style-type: none"> ▪ B3 S.A. - Brasil, Bolsa, Balcão 	

			<ul style="list-style-type: none"> ▪ Corporate and issuers' services TSP ▪ Banking services such as (i) Settlement bank; (ii) Back-office services for investment funds; (iii) Custody and representation for non-resident investors; (iv) Depository institution of BDRs – Brazilian Depository Receipts, provided by Bank B3; ▪ Infrastructure for financing such as centralized database for liens over vehicles and real estate. 	
	BMV Group	CL CO CR MX PE US	<ul style="list-style-type: none"> ▪ Trading services (equities, listed derivatives); ▪ OTC Markets; ▪ Custody; ▪ Clearing and Settlement services; ▪ Corporate and issuers' services; ▪ Market Data services and data analytics; ▪ Depository. 	<ul style="list-style-type: none"> ▪ Mexican Stock Exchange (BMV)

Questions for consultation

- 1. Do you agree with the analysis provided and the trends identified in Chapter 2?***
- 2. Have you identified other major trends regarding the changes in the business models of exchanges?***
- 3. If yes, what other factors do you think might have contributed to the additional trends identified?***

Chapter 3 – Regulatory considerations on the potential risks and challenges and good practices

The market evolutions described in Chapter 2 have influenced the way exchanges and Exchange Groups are organized, which can potentially create new conflicts of interest, as well as operational and organizational interdependencies. These may give rise to potential risks and challenges concerning the regulatory functions and responsibilities of exchanges, as well as supervisory issues.

This Chapter of the Report analyses these supervisory issues and outlines good practices that regulators may consider adopting when supervising exchanges, particularly if they provide multiple activities and/or are part of an Exchange Group. The good practices are complemented by a non-exclusive list of supervisory tools used by IOSCO jurisdictions to address the issues under discussion, in the form of “toolkits”. Whilst these “toolkits” may serve as examples to other regulators in implementing the good practices, they do not wish to exhaust the way the proposed good practices can be implemented in each jurisdiction.

1. Organization of Exchanges and Exchange Groups

The governance structure of the exchanges and Exchange Groups may vary depending on the legal and regulatory framework in each jurisdiction. In many cases, the same entity might perform regulatory, commercial, and administrative functions. In other cases, separate entities may carry out regulatory functions, while other entities belonging to the same Exchange Group undertake the commercial and administrative functions. Typically, exchanges have in place specific provisions that seek to preserve the independence of their regulatory function.

One feature observed across some trading venues, on the basis of the survey responses, is the implementation of organizational models designed to optimise resource allocation and organizational capacity. One of the models mentioned in the surveys is the matrix structure, in which specific departments are established to manage the various business lines. In such models, cross-company functions are created to coordinate business lines and centralize activities, and employees may report to more than one manager.

These organizational structures might prove useful to fulfil certain objectives, allowing for better cross-functional collaboration and innovation, as well as more efficient use of resources and skills. However, they may also create some challenges, such as conflicts of interest risks, potentially reducing accountability and decision-making autonomy. Where some functions are carried out by a different entity within an Exchange Group, additional complexity may arise from the use of intragroup outsourcing.

Previous IOSCO work, and specifically the recommendations contained in the Final Report on Regulatory Issues (November 2006) arising from exchange evolution, may be relevant for the above-described issues. For instance, the report recommends that regulators should “*carefully assess the impact on resources of any changes to the regulatory model for exchanges, and ensure that the core regulatory obligations and operational functions of exchanges are appropriately organized and sufficiently resourced*”.

Under this perspective, it could be useful to take advantage of the experience and tools adopted by some IOSCO jurisdictions.

PROPOSED GOOD PRACTICES

Organization of Exchanges and Exchange Groups

Regulators could consider adopting the following **good practices**:

1. Assessing the organizational structure of the exchanges under regulators’ supervision in order to ensure that decision-making autonomy and independence regarding the discharge of their regulatory obligations including ensuring market integrity practices and controls are maintained at the level of the individual exchange, subject to domestic legal and regulatory requirements, and regulatory discretion, even if the exchange is part of an Exchange Group;
2. Assessing whether exchanges, under their supervision, have put in place arrangements and policies to ensure that they operate in compliance with their respective regulatory obligations. In particular, assessing whether individual exchanges, which are part of an Exchange Group, have sufficient expertise and knowledge on their own, to remain in control of any decision-making related to regulatory compliance;
3. Assessing whether there are any potential conflicts of interest that may arise due to exchanges being part of an Exchange Group and in managing its commercial interest and regulatory obligations.

a) Management of the Exchange

In some Exchange Groups, to enhance the coordination and alignment of interests, and to reduce the costs and complexity of managing multiple boards, members of the board of directors may also sit on the board of other entities within the Exchange Group. Similarly, senior managers may hold positions in multiple entities within the same Exchange Group.

This practice (informally referred to as “dual hatting”) can foster the sharing of expertise and information among board members and top management, which can improve the strategic decision-making and oversight of an Exchange Group as a whole.

On the other hand, this practice may create potential conflicts of interest and compromise the independence and accountability of board members and senior management. For example, dual hatting may impair the ability of board members to act in the best interest of each exchange they serve, especially when there are diverging or competing interests within the Exchange Group or with the shareholders of the Exchange Group.

Dual hatting may increase risks of the following conflicts of interest:

- conflicts between the objectives of the exchange/s and other entities within an Exchange Group; and
- conflicts regarding the adoption of specific decisions by the Exchange Group which may not align with the regulatory functions and obligations of an exchange (for instance, regarding financial resources, or the suspension of trading in case of a shared trading platform).

EXAMPLES OF TOOLKITS

Organization of Exchanges and Exchange Groups

Management of an Exchange

In all jurisdictions surveyed, regardless of whether exchanges have demutualized or not, there are legal and regulatory requirements, as well as supervisory practices relating to the management of an exchange. Specifically, the IOSCO jurisdictions surveyed have adopted a variety of tools to address the potential issues identified above, which may serve as examples in the implementation the proposed good practices, and in particular:

- ownership and voting limits;
- provisions related to the composition or structure of the board of an exchange, including requiring a minimum number of independent board members;
- independent directors to ensure autonomy both from the exchange and from the relevant shareholders of the exchange or Exchange Group;
- ensuring a fair representation of the exchange's members, issuers, and investors within the exchange board; and
- fit and proper requirements for board members, both individually and collectively. Fit and proper assessments may be carried out by the exchange or by the regulator.

Some IOSCO jurisdictions have restrictions on the number of simultaneous director or officer-level positions one person can hold, such as (i) prohibiting the merging of the positions of CEO and Chairman of the board, (ii) requiring each employee and board member to disclose all listed shares they own, and (iii) implementing a code of professional conduct regulating the board members' trading. Some jurisdictions also have in place a prohibition for board members of an exchange of a certain size to hold more than either (i) one executive directorship and two non-executive

directorships or (ii) four non-executive directorships. Another IOSCO jurisdiction prohibits one person from being an officer of two exchanges simultaneously.

Finally, some jurisdictions require listed exchanges on a market to comply with specific governance rules, particularly with regard to board composition.

b) Multiple reporting lines and the independence of regulatory functions of an Exchange

The use of multiple reporting lines in a functional organization, while helping to ensure consistency in the pursuit of strategic objectives of an exchange or Exchange Group, could have potential impacts on decision-making autonomy of an exchange if they allow direct reporting to managers outside the individual entity. This may especially be the case with regard to the performance of the regulatory functions of an exchange.

In the above context, multiple reporting lines may create conflicts of interest, including:

- between the functional managers at the level of the Exchange Group and the managers of the exchange, who may be subject to different regulatory requirements, responsibilities and objectives and may compete for human, financial and technological resources¹¹;
- between the managers of entities that are in different geographical areas, who may have diverging views regarding strategies, and policies of the group, also considering the applicability of different regulatory requirements (see point below);
- entities being subject to different regulatory frameworks, for instance the one applicable to the separate subsidiaries and the parent company of the Exchange Group and the regulatory framework applicable to the individual exchange, which may have different requirements regarding transparency, orderly trading and investor protection; and
- between the regulatory and commercial functions of an exchange.

EXAMPLES OF TOOLKITS

Organization of Exchanges and Exchange Groups

Multiple reporting lines and the independence of regulatory functions of an Exchange

Some IOSCO jurisdictions have adopted the following tools, which may serve as examples to other jurisdictions in the implementation of the good practices listed above:

¹¹ For example, a manager may be interested in maximizing the efficiency and quality of the processes and services offered by its department and the staff allocated at the Exchange Group level, while an exchange manager must be focused on operating an exchange consistent with regulatory requirements.

- **Establishment of an independent body**
 - requiring that the regulatory function of the exchange must be carried out by an independent department/entity, in some cases also establishing qualification criteria for the directors of that independent body;
 - requesting the exchange to have regulatory functions performed by a wholly-owned subsidiary with separate management and board, which reports to the board of the parent company of the Exchange Group;
- **Internal function**
 - tasking trading venue operators with establishing and enforcing their organizational and trading rules;
 - requiring that regulatory functions be performed by the registered exchange. In particular, certain conditions/restrictions/safeguards are established in some IOSCO jurisdictions governing how these regulatory functions are performed by the exchange, such as:
 - provisions requiring that commercial interests must not adversely affect the performance of the exchange's regulatory functions;
 - general conflicts of interest management obligations;
 - limits that ensure that key individuals, such as compliance officers, are not assigned responsibility for any commercial function which conflict with or impair, or are likely to impair, their ability to perform the relevant regulatory functions;
 - requiring that the internal department of the exchange responsible for these functions must be independent (with operational autonomy) and have its own budget/resources to carry out the activities under its responsibility;
 - requiring the department responsible for performing these regulatory functions to be led by a board/committee composed of mostly, if not all, independent members;
 - establishing limits on ownership of certain specific roles, and voting;
 - provisions on the confidentiality of information pertaining to the regulatory function of the exchange by the exchange and the holding company, and their personnel, directors, officers, employees, and agents, providing that it shall not be used for any non-regulatory purposes and shall not be made available to any person other than under specified conditions;
 - requiring the establishment of a committee composed of independent board members dedicated to the monitoring of the performance of the regulatory function;
 - providing for specific supervision arrangements in the case of an exchange which is also a listed entity;
 - imposing limits to the outsourcing of core functions of the exchange (including admission to trading of financial instruments, establishment and any subsequent changes to the rulebook of the trading venue, and suspension and removal of financial instruments from trading and mechanisms to halt trading);

- imposing limits to the activities that an exchange can perform other than its regulatory role;
- requiring registration of at least one employee in the compliance and the risk departments with the regulator; and
- requiring submission of the exchange’s plan for the performance of regulatory functions to the regulator for approval or submission of the exchange’s annual regulatory report on compliance with ongoing requirements to the regulator.

Both models (separate Self-Regulatory Organization – SRO¹² or within exchange by an SRO committee) might also be envisaged, whereby, if the SRO model is adopted, it cannot be for-profit.

c) Letter-box entities and outsourcing practices¹³

It has been observed, particularly in the EU, that Exchange Groups may centralize functions, whereby each trading venue belonging to the group transfers some or all of its activities or responsibilities relating to the same business line to a single entity within the group, usually being the parent company or a shared service centre. This process is usually put in place through intragroup outsourcing, although in most jurisdictions exchange functions remain the responsibility of the individual exchange, subject to regulatory requirements, regardless of any intragroup outsourcing.

Intragroup outsourcing can enhance the efficiency and scalability of trading venues within a group. They can reduce duplication, fragmentation, or complexity of processes and systems across different markets and products, as well as foster innovation and competitiveness of trading venues within a group providing access to new technologies, capabilities, or markets from other entities within the group. However, intragroup outsourcing may also create potential risks, namely:

- the creation of operational or financial dependencies or vulnerabilities for trading venues within a group, as they may rely on a single entity or source for their activities or responsibilities, and face disruptions or losses in case of failure or crisis;
- undermining the autonomy and accountability, as the individual trading venue may put a higher level of reliance over their activities or responsibilities if the outsourcing is carried out at the

¹² See Section B on the Principle relating to self-regulation of the IOSCO of the Methodology For Assessing Implementation of the IOSCO Objectives and Principles of Securities Regulation, <https://www.iosco.org/library/pubdocs/pdf/IOSCOPD562.pdf>

¹³ According to OECD’s definition, a “Letterbox Company” is “a paper company, shell company or money box company, i.e., a company which has complied only with the bare essentials for organization and registration in a particular country and the actual commercial activities are carried out in another country” (OECD Glossary of Tax Terms).

level of the same Exchange Group, and face conflicts of interest or influence from other entities within the group;

- the reduction of the diversity and adaptability of trading venues within a group, as they may lose their distinctive features or advantages, and face challenges or barriers to respond to changing customer needs or market conditions; and
- the application of lower standards in the selection and monitoring of the service provider, not ensuring the proper oversight at the individual trading entity level on the activities outsourced.

If extensive use of outsourcing occurs, meaning that the individual entity does not directly perform most of the exchange’s regulatory functions, its autonomy and compliance with the minimum authorisation standards might be put at risk, with the creation of a letter-box company. This risk might be more pronounced especially in a Multinational Exchange Group context, where the parent company centralises the activities in a geographical location, but still has the possibility to export its services, establishing a subsidiary in the territory of another jurisdiction.

EXAMPLES OF TOOLKITS

Organization of Exchanges and Exchange Groups

Letter-box entities and outsourcing practices

As mentioned above, particularly in the EU, specific guidance has been developed requiring that any outsourcing or delegation arrangement from entities authorised in the EU27 to third country entities should be strictly framed and consistently supervised. Outsourcing or delegation arrangements, under which entities confer either a substantial degree of activities or critical functions to other entities, should not result in those entities becoming letterbox entities nor in creating obstacles to effective and efficient supervision and enforcement.

Additionally, examples of the tools adopted by IOSCO jurisdictions to address the issues mentioned above include:

- rejection of extensive use of outsourcing and delegation arrangements to ensure adequate control procedures for outsourced activities. These jurisdictions usually also require the identification of a function specifically in charge to monitor the outsourcing and deliver adequate reports to the administrative and control bodies;
- requirement that the exchange shall operate with qualified staff and that key executives and senior members need to have effective decision-making powers and dedicate sufficient amount of time to fulfil their duties;
- requirements of a “statement of responsibilities” by those persons accepting a Senior Management Function, subject to the approval of the regulator, clearly setting out their role and responsibilities; and

- review by regulators of dual reporting lines closely, including putting limits on them.

d) Financial resources

The trend of centralisation from an operational perspective might also have an impact on the management of financial resources within an Exchange Group.

The management of financial resources across the different business lines and subsidiaries of an Exchange Group might be impacted if one business line generates more revenue than others. For instance, cash pooling might be a technique used to balance funds within a group of companies, which can allow for the optimisation in the use of internal liquidity and can reduce the need for external financing. This practice, as well as other financial arrangements within an exchange or an Exchange Group, can offer advantages, such as improved liquidity management, lower financing costs, higher investment returns, and simplified cash flow forecasting. However, they may also involve some risks and challenges, such as concerns about diverting financial resources from the regulatory functions of an exchange to other business lines.

EXAMPLES OF TOOLKITS

Organization of Exchanges and Exchange Groups

Financial resources

In most IOSCO jurisdictions, exchanges are subject to certain requirements to ensure sufficient financial resources are allocated to the operation of the exchanges. In particular, examples of tools used by regulators to address the above issues, include requiring supervised exchanges to:

- submit audited financial statements or annual budget to regulators;
- maintain reserve funds, typically liquid assets, for continuous operation of the exchanges in case they incur losses, taking into account various risks that exchanges are exposed to;
- calculate various ratios to measure whether sufficient financial resources are maintained by the exchanges; and
- restrict the use of the regulatory funds received by the exchange, so that these can be limited to fund the regulatory operations of the exchange or to pay restitution and disgorgement to their clients.

e) Other activities

Across IOSCO jurisdictions, exchanges or their subsidiaries and affiliates may carry out other functions, including activities that may not be regulated within a specific jurisdiction in addition to regulated functions¹⁴. These activities may include:

- data processing and data analytics;
- creation and development of algorithms for the derivatives markets;
- information services providing access to various market data products and services;
- corporate trust services;
- development of indices and benchmark services such as the calculation, publication and oversight of benchmark rates; and
- technology services including information security services.

Some Exchange Groups own global information providers, which are more akin to media companies and, as such, may not be subject to financial market regulation within certain jurisdictions.

The expanded scope of functions performed by exchanges, or within Exchange Groups, and their relationship with regulated activities may present certain risks and challenges from a regulatory perspective. When conducting a review of the regulatory framework, it is important to consider the evolution of the activities and business lines carried out by exchanges, or subsidiaries and affiliated entities of the Exchange Group, to adequately address risks posed to investor protection, financial stability, efficient and transparent markets as well as to market integrity.

For example, one risk arising from exchanges performing other activities is the potential for conflicts of interest to arise between these and the exchange functions. In the case of Multinational Exchange Groups, differences in regulatory perimeters and remits among jurisdictions may further complicate supervision, depending on whether a specific activity is regulated in each jurisdiction.

An additional risk may come from the fact that a client may think that a service provided by an exchange falls automatically under a regulation while it is not always the case.

Finally, certain risks relating to other activities, such as financial and cyber risks, might propagate to the regulated activities carried out by an exchange.

¹⁴ Some of the functions listed may be regulated in other jurisdictions.

EXAMPLES OF TOOLKITS

Organization of Exchanges and Exchange Groups

Other activities

IOSCO jurisdictions generally require exchanges to have measures in place to identify and manage potential conflicts of interest.

Among them, the following tools have been identified which relate to other activities performed by an exchange or Exchange Group which might serve as examples to other jurisdictions when implementing the good practices listed above at the beginning of this Section:

- requiring the establishment of additional financial resources and sufficient liquidity;
- requesting exchanges to ensure that clients clearly understand which activities are regulated and which are not;
- assessing the risks of non-regulated activities that may be posed to the regulated functions of the exchanges and their connection or similarity to the regulated activities;
- assessing the Exchange Groups' operational and regulatory risks as a whole;
- requiring the provision of information about exchanges' subsidiaries and affiliates in their initial application to register as exchanges and on an annual basis thereafter;
- requiring the identification of potential conflicts of interest between the regulated and non-regulated activities and limiting activities that exchanges can perform;
- monitoring new business development initiatives to assess potential impacts on the regulated functions of the exchanges; and
- only allowing for additional services based upon notification and/or approval by the regulator.

2. Supervision of Exchanges and other Trading Venues within Exchange Groups

Supervising an exchange or other trading venue that belongs to an Exchange Group, especially when entities within the Exchange Group performs different functions, may pose additional challenges. For example, it may be difficult to ensure adequate oversight at the level of the exchange and mitigate conflicts of interest, if, for instance, other subsidiaries fall outside of a jurisdiction's regulatory scope.

In relation to the risks and challenges connected to the supervision of exchanges within Exchange Groups, the IOSCO Principles¹⁵ applying to regulators state that the "*Regulator should have adequate powers, proper resources, and the capacity to perform its functions and exercise its powers*" (Principle 3). In addition, the "*Regulator should have or contribute to a process to identify, monitor, mitigate and*

¹⁵ See Objectives and Principles of Securities Regulation, <https://www.iosco.org/library/pubdocs/pdf/IOSCOPD561.pdf>

manage systemic risk, appropriate to its mandate” (Principle 6) and “*should have or contribute to a process to review the perimeter of regulation regularly*” (Principle 7), ensuring that “*conflicts of interest and misalignment of incentives are avoided, eliminated, disclosed or otherwise managed*” (Principle 8).

PROPOSED GOOD PRACTICES

Supervision of Exchanges and other Trading Venues within Exchange Groups

In order to address these challenges, regulators could consider the following **good practice** identified across IOSCO jurisdictions:

4. Assessing whether exchanges under their supervision establish effective arrangements for market operations, including conflicts of interest management, corporate and operational governance and promoting transparency of trading. Regardless of the nature, size, or complexity of the trading venue, it is important that regulators consider monitoring whether supervised exchanges have in place processes to deal with the evolution of their corporate structure and the potential conflicts of interest arising from it.

EXAMPLES OF TOOLKITS

Supervision of Exchanges and other Trading Venues within Exchange Groups

In order to implement the above good practice, regulators could consider the following examples of tools used by a number of IOSCO jurisdictions to address issues related to Exchange Groups:

- requiring the Exchange Group to ensure that its exchange subsidiaries operate in a manner consistent with the public interest and are sufficiently funded;
- requiring, on a periodic or ad hoc basis, specific information related to the business of the Exchange Group;
- imposing corporate governance requirements, including independence arrangements between Exchange Group business units and the regulatory functions of the individual exchange;
- requiring the establishment of a Memorandum of Understanding (MoU) between the exchange and the other entities belonging to the same Exchange Group to mitigate the risk of lack of supervisory convergence/un-coordinated supervisory approach, the risk of information arbitrage and the risk of the parent’s decisions which could affect the decisions of the exchange;

- limiting intra-group outsourcing, such as requiring its specific approval by the regulator, prohibiting delegation of responsibility and/or outsourcing of core functions of the exchange;
- reviewing and/or clarifying the regulatory perimeter to ensure consistent regulatory treatment;
- imposing reporting and regulatory requirements on the Exchange Group as a whole, including with respect to governance, the management of conflicts of interest and the allocation of resources to each exchange so that regulators have direct oversight over both individual exchanges as well as the Exchange Group;
- ensuring that substance requirements are met, such as sufficient physical presence at local level, monitoring the potential relocation of activities/functions from the individual exchange to the Exchange Group;
- ensuring that regulators are in a position to effectively supervise and enforce legal and regulatory requirements to Exchange Groups;
- considering the business model, in order to assess whether the exchange strategy is implemented in a manner ensuring the sound and prudent management of the individual exchanges in the Exchange Group and in the interest of the clients (e.g. members, participants, issuers, investors) they serve; and
- imposing restrictions on the ownership of the Exchange Group holding company as well as its shareholdings, for instance requiring prior communication to the regulator of a proposed acquisition, with a power to potentially oppose where there are objective and demonstrable reasons to believe that a healthy and prudent management of the market is put at risk.

3. Supervision of Multinational Exchange Groups

As mentioned above, several exchanges and Exchange Groups operate on a cross-border basis. Although cross-border activities may be regulated differently across IOSCO jurisdictions, exchanges and other trading venues may have some, or even a majority, of their members from other jurisdictions. Following mergers and acquisitions, exchanges and other trading venues may continue operating independently of foreign parent companies, or operations may be migrated to a global trading system infrastructure. Furthermore, an Exchange Group might have subsidiaries in different jurisdictions, operating as a trading venue or offering other services.

This may raise a number of supervisory and regulatory topics, as follows:

a) Differences in the legal frameworks

With cross-border activities, differences in legal frameworks are anticipated. Generally, individual exchanges and other trading venues that are owned by Multinational Exchange Groups are regulated and supervised by the relevant regulatory authorities in the jurisdictions in which they operate.

b) Cross-border supervision in case of outsourcing

Where functions of an exchange or trading venue are outsourced to entities in another jurisdiction, including to companies belonging to the same Exchange Group, additional considerations may arise. For example, it may be difficult for an exchange to monitor and control a foreign service provider.

It may also be necessary to consider whether there are any economic, social, legal, or political conditions that might adversely affect a foreign service provider's ability to perform certain services. To ensure appropriate transparency and oversight where a critical business service is outsourced (such as operation of the trading platform), including where the service provider is part of the same Exchange Group, the outsourcing considerations are subject to greater rigor. This may be the case where the outsourcing arrangement has the potential, if disrupted, to have a significant impact on the trading venue's business or on the activities of participants on the venue.

Regarding the international operation of Multinational Exchange Groups, cross-border cooperation is an important focus for IOSCO. The IOSCO Objectives and Principles of Securities Regulation also include the Principles for Cooperation in Regulation¹⁶.

Specifically, IOSCO set out principles for regulators to: “*have authority to share both public and non-public information with domestic and foreign counterparts; ... establish information-sharing mechanisms that set out when and how they will share both public and non-public information with their domestic and foreign counterparts; [and] ... allow for assistance to be provided to foreign Regulators who need to make inquiries in the discharge of their functions and exercise of their powers.*”¹⁷

¹⁶ See IOSCO, Objectives and Principles of Securities Regulation (May 2017), <https://www.iosco.org/library/pubdocs/pdf/IOSCOPD561.pdf>.

¹⁷ *Id.* at 7.

Moreover, the supervision of exchanges that are owned by Multinational Exchange Groups has been extensively considered by IOSCO over the years¹⁸.

PROPOSED GOOD PRACTICES

Supervision of Multinational Exchange Groups

In light of the above, regulators could consider the following **good practices**:

5. Having regard to domestic legal and regulatory requirements, making use of mechanism such as ad hoc cooperation, MOUs, supervisory colleges, and regulatory networks as

¹⁸ In 2006, IOSCO made recommendations about fostering cooperation in supervising international Exchange Groups. Specifically, in the 2006 report (*See* IOSCO, Regulatory Issues Arising from Exchange Evolution, at Recommendation 4 - Nov. 2006, <https://www.iosco.org/library/pubdocs/pdf/IOSCOPD225.pdf>), IOSCO recommended that securities regulators be prepared to share relevant information concerning cross-border activity and highlighted its importance in cross-border supervision. Issues related to supervisory cooperation of exchanges and markets have been revised in 2010. In particular, IOSCO expanded on the 2006 recommendation in the 2010 Final Report on Principles Regarding Cross-Border Supervisory Cooperation (See IOSCO, Principles Regarding Cross-Border Supervisory Cooperation (May 2010), <https://www.iosco.org/library/pubdocs/pdf/IOSCOPD322.pdf>) and included a sample memorandum of understanding (“MOU”). The report described “cooperative mechanisms and suggest[ed] how regulators can enhance cross-border cooperation to better supervise regulated entities that operate across borders. It also suggest[ed] that regulators should explore opportunities to further collaborate to identify, assess, and mitigate emerging global risks.” (See IOSCO Task Force on Cross-Border Regulation, at 2 (Sept. 2015), <https://www.iosco.org/library/pubdocs/pdf/IOSCOPD507.pdf>). Specifically, IOSCO recommended that authorities “consult, cooperate and be willing to share information to assist each other in fulfilling their respective supervisory and oversight responsibilities.” The report also highlighted four mechanisms for sharing information between regulators: ad hoc cooperation, MOUs, supervisory colleges, and regulatory networks, each of which can provide different benefits to such cooperation. In June 2013, IOSCO created the Task Force on Cross-Border Regulation, and in September 2015, the Task Force released a final report describing the cross-border regulatory toolkit, a set of “tools which are commonly used by IOSCO members to regulate cross-border securities market activities.” This toolkit included three tools—national treatment, recognition, and passporting—and briefly described certain cross-border exchange activities (IOSCO followed up on this report in 2019 with the publication of Market Fragmentation & Cross-border Regulation. See IOSCO, Market Fragmentation and Cross-border Regulation - June 2019, <https://www.iosco.org/library/pubdocs/pdf/IOSCOPD629.pdf>). Finally, in 2022, IOSCO explored the Lessons Learned from the Use of Global Supervisory Colleges, which presented the Follow-Up Group’s work on deepening supervisory cooperation (See IOSCO, Lessons Learned from the Use of Global Supervisory Colleges - Jan. 2022, <https://www.iosco.org/library/pubdocs/pdf/IOSCOPD696.pdf>).

considered under previous IOSCO reports, to facilitate and support supervision and supervisory cooperation;

6. Monitoring developments in the structure and ownership of the exchanges and Multinational Exchange Groups to ensure that they continue to have the ability to adequately supervise exchanges and trading venues that operate in their jurisdiction.

EXAMPLES OF TOOLKITS

Supervision of Multinational Exchange Groups

In particular, among IOSCO members, the following examples of tools are used by regulators to implement the good practices above:

- the stipulation of agreements of cooperation or Memorandums of Understanding to exchange information;
- the set up of an annual supervisory plan;
- consultations across authorities and coordination of activities;
- supervisory or enforcement-related assistance; and
- establishment of working groups or committees whereby they meet on a regular basis with other authorities in other jurisdictions to coordinate their actions with respect to a Multinational Exchange Group regarding supervisory matters of common interest.

In order to address the potential differences across jurisdictions:

- certain regulatory frameworks prescribe that individual trading venues (regardless of whether they are owned by Multinational Exchange Groups) are required to register in the jurisdiction where they intend to operate, establishing a specific branch or subsidiary;
- some regulatory frameworks allow the offering of market services by a foreign trading venue relying on the existing license in the home jurisdiction or require a specific additional domestic clearance. Regulators in some jurisdictions that allow foreign trading venues to operate on a cross-border basis have specific processes to grant licenses that may differ from one regulatory body to another;
- both the above options might be available in some jurisdictions.

In the implementation of the above approaches:

- some regulators only grant licenses to foreign trading venues when they have a cooperation agreement in place with the domestic regulator. These agreements specify what types of information must be shared, as well as the obligation of regulators to inform each other when a trading venue has been sanctioned for any violations. In some jurisdictions, an

“equivalence” assessment is also carried out by the host authority to activate recognition regimes;

- some regulators may also have different processes based on whether the foreign trading venue operates through a domestic branch, subsidiary, or remotely. In some jurisdictions, foreign trading venues that operate through a domestic branch or a subsidiary would have to adhere to the regulations that apply to domestic trading venues. For those operating remotely and exempted from domestic regulations, the regulator might nevertheless consider the regulatory framework of the trading venue’s home jurisdiction as well as consider the level of cooperation between both regulators, before allowing cross-border operation.

Regarding cross-border ownership, the following tools are used by regulators:

- review or approval of changes in control of an exchange;
- non-objection procedures after notification by the exchange.

In both cases, a number of relevant factors are checked in some IOSCO jurisdictions (fit and proper requirements, conflict of interest, assessment of the process of acquisition, the availability to the public of information on relevant shareholders, etc).

Questions for consultation

- 4. Do you agree with the risk and challenges identified in Chapter 3?*
- 5. Do you think there are other risks and challenges that have not been identified?*
- 6. Do you have comments on the proposed good practices identified in the boxes in Chapter 3?*
- 7. Do you have suggestions regarding other good practices and/or examples of toolkits to be included?*

Chapter 4 - Conclusions

The dynamic transformations within the realm of exchanges, notably marked by the widespread demutualization/non-mutualization, adoption of for-profit structures, electronification and diverse business models, have incentivized these entities to shift towards competitive, cross-border operations and have led to the emergence of Multinational Exchange Groups. The expansion into various business lines, including data services and technology provision, reflects a response to market competition, technological advancements, and regulatory changes.

While these changes create opportunities for increased efficiency and revenue diversification, they also introduce new regulatory challenges, such as preserving the independence of the regulatory function, potential conflicts of interest and organizational complexities. The regulatory considerations and good practices outlined in the Report emphasize the importance of adapting supervisory approaches to address these evolving market structures, helping to ensure the continued integrity and efficiency of financial markets in the face of ongoing developments and globalized operations while maintaining the regulatory independence of member jurisdictions.

Annexes

Annex A. Summary of respondents to the surveys

Regulators responses to C2 Market Structure Surveys	
Jurisdiction	Authority
1. Abu Dhabi	Financial Services Regulatory Authority (FSRA)
2. Australia	Australian Securities and Investment Commission (ASIC)
3. Brazil	Comissão de Valores Mobiliários (CVM)
4. Canada	Ontario Securities Commission (OSC), Autorité des marchés financiers (QAMF), and Canadian Investment Regulatory Organization (CIRO)
5. Dubai	Dubai Financial Services Authority (DFSA)
6. France	Autorité des marchés financiers (AMF)
7. Germany	Federal Financial Supervisory Authority (BaFin)
8. Hong Kong	Securities and Futures Commission (SFC)
9. India	Securities and Exchange Board of India (SEBI)
10. Italy	Commissione Nazionale per la Società e la Borsa (Consob)
11. Japan	Financial Service Agency (JFSA)
12. Kuwait	Capital Markets Authority (CMA)
13. Malaysia	Securities Commission (SC)
14. Mexico	Comisión Nacional Bancaria y de Valores (CNBV)
15. Netherlands	Autoriteit Financiële Markten (AFM)
16. Nigeria	Securities and Exchange Commission (SEC)
17. Romania	Financial Supervisory Authority (FSA)
18. Saudi Arabia	Capital Market Authority (CMA)
19. Singapore	Monetary Authority of Singapore (MAS)
20. Spain	Comisión Nacional del Mercado de Valores (CNMV)
21. Sweden	Finansinspektionen (FSA)
22. Switzerland	Financial Market Supervisory Authority (FINMA)
23. Turkey	Capital Markets Board (CMB)
24. United Kingdom	Financial Conduct Authority (FCA)
25. United States	Securities and Exchange Commission (SEC)

Market Participants responses to C2 Market Structure Survey	
Organization	
1.	B3 S.A. – Brasil, Bolsa, Balcão (“B3”)
2.	Cboe Global Markets (Cboe)
3.	Korea Exchange
4.	Singapore Exchange
5.	Six Group
6.	World Federation of Exchanges (WFE)

Annex B. Previous IOSCO Reports and recommendations

A number of earlier IOSCO reports have addressed many of the issues this report is aimed at.

The 2006 *Regulatory Issues Arising From Exchange Evolution Report* (the 2006 Report)¹⁹ looked at the demutualization of exchanges, the role of exchanges as for-profit organizations, the regulatory responses to these changes and set out some specific recommendations for regulators. Traditionally, exchanges were member owned and were responsible for the regulation of both the markets and of their members. However, in the years up to 2006, most major exchanges converted into for-profit companies with broader shareholding, rather than membership ownership. A report was therefore developed to look at consequences of exchanges as for-profit entities operating in a more competitive marketplace, the restructuring of their operations and the implications for regulatory responses. By 2006 most regulatory authorities had sufficient experience in addressing the issues raised by demutualization and IOSCO therefore launched a project to understand the implications. Following a consultation, the 2006 Report made a number of recommendations²⁰. Given that the developments

¹⁹ <https://www.iosco.org/library/pubdocs/pdf/IOSCOPD225.pdf>

²⁰ In particular:

- **Recommendation 1** – *Regulators should have adequate arrangements to enable them to keep the changing market environment under review and identify emerging issues in a timely fashion. These arrangements should include ongoing dialogue with exchanges (which could include regular meetings with exchange boards and/or management or specific reporting obligations) to help ensure an understanding of their business and practices.*
- **Recommendation 2** – *Regulators should assess whether changes being made by exchanges require any adjustments to the regulatory framework for an individual exchange or for exchanges generally and should address any such need for changes promptly.*
- **Recommendation 3** – *Regulatory authorities should carefully assess the impact on resources of any changes to the regulatory model for exchanges, and ensure that the core regulatory obligations and operational functions of exchanges are appropriately organized and sufficiently resourced.*
- **Recommendation 5** – *Regulatory authorities should consider competition issues that may arise in connection with the evolution of exchanges as discussed above where such evolution impacts market integrity, efficiency or investor protection.*

The last recommendation discussed the issue of potentially increasing consolidation and concentration as a result of market forces. Specifically, competition would encourage creation of the transnational group with the aim of expanding their business and achieving economies of scale. Secondly, competition would encourage firms to diversify into new areas, and in particular “non-regulated” activities or expand into services outside the direct traditional regulatory scope of exchange activities. Thirdly, competition could result in cross-border business development through the expansion of remote

anticipated in the 2006 Report have been borne out in recent years and considering that the 2006 Report itself noted the need to monitor ongoing developments, nearly 20 years hence, it is appropriate to review the recommendations this 2006 Report contained.

The 2011 report “*Regulatory Issues Raised by the Impact of Technological Changes on Market Integrity and Efficiency*”²¹ (the 2011 Report) looked at the technological change that has occurred relating to the participants, how they connect to the markets, and the markets themselves, and the impact of these changes on the capability of markets authorities to supervise markets effectively.

The 2013 report on “*Regulatory Issues Raised by Changes in Market Structure*”²² (the 2013 Report) updated the 2001 report “*Transparency and Market Fragmentation*”²³ (the 2001 Report) and analyzed the evolution of secondary market structure, and the effect, of market fragmentation on the price formation process, market efficiency and integrity. This report also identifies issues and risks posed by developing market structures and establishes four recommendations²⁴.

membership, the establishment of new market facilities in foreign jurisdictions and mergers with, or acquisitions of, exchanges in other jurisdictions.

²¹ <https://www.iosco.org/library/pubdocs/pdf/IOSCOPD354.pdf>

²² <https://www.iosco.org/library/pubdocs/pdf/IOSCOPD431.pdf>

²³ <https://www.iosco.org/library/pubdocs/pdf/IOSCOPD124.pdf>

²⁴ In particular:

- **Recommendation 1.1:** “*Regulators should regularly monitor the impact of fragmentation on market integrity and efficiency across different trading spaces and seek to ensure that the applicable regulatory requirements are still appropriate to protect investors and ensure market integrity and efficiency, including with regard to price formation, bearing in mind the different functions that each trading space performs.*”

Annex C. Summary of consultation questions

- 1. Do you agree with the analysis provided and the trends identified in Chapter 2?**
- 2. Have you identified other major trends regarding the changes in the business models of exchanges?**
- 3. If yes, what other factors do you think might have contributed to the additional trends identified?**
- 4. Do you agree with the risk and challenges identified in Chapter 3?**
- 5. Do you think there are other risks and challenges that have not been identified?**
- 6. Do you have comments on the proposed good practices identified in the boxes in Chapter 3?**
- 7. Do you have suggestions regarding other good practices and/or examples of toolkits to be included?**