IOSCO Standards Implementation Monitoring (ISIM) on Secondary and Other Market Principles



THE BOARD OF THE INTERNATIONAL ORGANIZATION OF SECURITIES COMMISSIONS

FR04/19

FEBRUARY 2019

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Contents

1. EX	ECUTIVE SUMMARY	1		
2. BA	CKGROUND	3		
2.1 IO 2.2 Sc	OSCO Principles Relating to Secondary and Other Markets cope	3 4		
3. OB	JECTIVES, METHODOLOGY AND REVIEW TEAM	5		
3.2. R	ature of The Review and Objectives eview Team eview Process	5 6 6		
4. PA	RTICIPATING JURISDICTIONS	6		
4.1 M	4.1 Markets Covered			
5. KE	Y FINDINGS - PRINCIPLE BY PRINCIPLE	8		
5.1 5.2 5.3 5.4 5.5	Principle 33 Principle 34 Principle 35 Principle 36 Principle 37	8 14 17 20 25		
6. MI	FID II	31		
7. CO	NCLUSION AND RECOMMENDATIONS	32		
	EXURE1- List of Participating Jurisdictions EXURE 2- Details of Markets and Authorized Exchanges	37 38		
	EXURE 3 - Cross Border Recognition	47		
ANNI	EXURE 4 - Introduction and Withdrawal of Circuit Breaker in China	48		
ANNI	EXURE 5- Co-Location	50		
ANNI	EXURE 6 - Surveillance Systems	52		
	EXURE 7- Criminal Sanctions	54		
ANNI	EXURE 8- Stock / Bond Connect – Hong Kong, Shanghai And Shenzhen Stock Exchanges	58		
ANNI	EXURE 9 - Default Procedures	59		
ANNI	EXURE 10 - Consultation Arrangements	60		
	EXURE 11- Short Selling in Equity Markets EXURE 12 - MiFID II	61 62		

1. EXECUTIVE SUMMARY

The AC developed IOSCO Standards Implementation Monitoring (ISIM) as a new tool to monitor the implementation of the IOSCO Principles and Standards by the member jurisdictions.

This report sets out the findings of the first ISIM on secondary and other markets Principles (P33-37), with scope of markets limited to authorized exchanges. These five Principles are part of IOSCO's 38 Objectives and Principles of Securities Regulation (Principles) which provide core elements of an essential regulatory framework for securities regulations.

The secondary and other markets Principles are intended to promote fair, efficient and transparent markets. Principles 33 and 34 refer to authorization, oversight and ongoing supervision requirements, Principle 35 covers transparency requirements, Principle 36 covers detection and deterring market misconduct and Principle 37 deals with managing risks (such as monitoring large exposures, default procedures and short selling).

The main objective of this review is to present a global overview of the status of implementation of each of the five Principles by the participating member jurisdictions, based on their self-assessments. The Review also aimed to identify gaps in implementation as well as examples of good practices in implementing these Principles.

A total of 40 member jurisdictions participated in the ISIM with participation from both emerging and advanced markets, and balanced representation from across all regions. The Review is based on the implementation progress reported by the participating jurisdictions as of 15 October 2018.

Key Findings

Based on the information reported by the participating jurisdictions, the Review found that the implementation of Principles 33-37 is generally high across most of the participating member jurisdictions. The review noted that a variety of different approaches to implementation have been observed and several trends and examples have been provided in the report. While the status of implementation varies across jurisdictions, the gaps in implementation have been observed mostly in nascent and emerging market jurisdictions.

Principle 33. Principle 33 has been observed to be largely implemented, with all jurisdictions reported having the requirement for authorization of exchanges (mostly by regulator). Further, the implementation has been high in relation to (a) arrangements for supervision of exchanges; (b) disclosure of order routing procedures and execution rules; and (c) equitable access to market rules and operating procedures.

Gaps in implementation were found in some jurisdictions, mainly relating to lack of adequate trading control mechanisms, no access to books and records of outsourced service providers, lack of sufficient prudential arrangements, no automated pre-trade controls, no criteria for authorization of exchange and lack of mechanisms for review of trade matching algorithms.

Principle 34. Overall, participating member jurisdictions reported a high level of implementation of Principle 34 as well. All participating member jurisdictions reported having requirements for supervision of exchanges, monitoring of day-to-day trading on exchanges and regulator's access to all pre-trade and post-trade information. The main gap

reported refers to the inability of four¹ jurisdictions to withdraw the authorization of the authorized exchanges.

Principle 35. Principle 35 has been observed to be largely implemented, with all member jurisdictions having requirements for pre-trade and post-trade transparency relating to trading on authorized exchanges. Derogation from real time transparency is permitted in most jurisdictions and the regulator has access to information relating to such derogations.

Principle 36. Overall, participating member jurisdictions reported that Principle 36 has been largely implemented, with all member jurisdictions having the regulatory framework for prohibition of market manipulation, insider trading etc. Gaps in implementation have been found relating to adequacy of enforcement sanctions in one² jurisdiction and cross-market surveillance in one³ jurisdiction.

Principle 37. Overall, participating member jurisdictions reported that Principle 37 has been largely implemented. However, gaps in implementation have been found mainly in relation to the monitoring of large exposures in three⁴ jurisdictions, default procedures in two⁵ jurisdictions, reporting of short selling in four⁶ jurisdictions and reporting of large trader positions in commodity derivatives markets in one⁷ jurisdiction.

Recommendations

The report makes several jurisdiction specific recommendations (refer to Section 7) for conducting reforms against the identified gaps in implementation.

Practices

The review identified several practices⁸ on key issues relating to the reviewed Principles, followed in various jurisdictions. These practices are intended to serve as useful examples with a caveat that there is no single correct approach to a regulatory issue. The means of implementation can vary among jurisdictions depending upon their local market conditions and regulatory structure.

- ⁴ Albania, Mexico and Romania
- ⁵ Mexico and Romania
- ⁶ Angola, Kuwait, Mexico and South Africa
- 7 Turkey

¹ Egypt, Morocco, Thailand and Saudi Arabia

² Morocco

³ South Africa

⁸ Referred in Section 5 - Principle 33 (criteria for authorization, cross-border recognition, trading control mechanisms, outsourcing and fairness of order execution procedures); Principle 34 (monitor day-to-day trading and supervision of exchanges); Principle 35 (Dark Pools); Principle 36 (market surveillance, criminal sanctions, cross-market trading, cross-border cooperation and commodity derivatives markets); and Principle 37 (monitoring large exposures, information sharing on large exposures, supervisory colleges, default procedures, consultation for minimizing adverse effects of market disruption, and short selling).

2. BACKGROUND

The IOSCO Assessment Committee (AC) was set up with the main objective of encouraging full, effective and consistent implementation of IOSCO Principles & Standards across the IOSCO membership. The AC developed ISIM as a new tool to monitor the implementation of the IOSCO Principles and Standards by the member jurisdictions.

As a part of the AC Forward Work Program, the IOSCO Board in May 2017 approved the project specification for conducting the first pilot ISIM on secondary and other market Principles (P33-37).

The ISIM exercise will allow IOSCO to present a global overview of implementation of the Principles by member jurisdictions and gather useful feedback on the subject. In contrast to country reviews, the ISIM exercise aims to be less resource intensive and cover a larger population of member countries. The Review will present an opportunity to both developed and emerging market jurisdictions to participate in an implementation monitoring exercise on secondary and other market principles based on the revised IOSCO Assessment Methodology.⁹

The other benefits of ISIM include:

- i. The reporting process through the ISIM exercise incentivizes jurisdictions to reflect and consider the extent of their implementation efforts under the relevant IOSCO Principles and encourages greater consistency;
- ii. The ISIM analyzes the similarities and differences in implementation by the various jurisdictions and identifies good practices, which will be useful in future policy, capacity building and technical assistance work;
- iii. The ISIM allows the AC to cover a large number of members and their status against a number of Principles, all based on the application of the IOSCO Methodology. It differs from a full-fledged Country Review as it focuses on one area of the securities regulatory regime provided by each of the 10 categories under the Methodology.
- iv. This program covers a large number of jurisdictions including Growth and Emerging Market (GEM) jurisdictions and therefore balances IOSCO's monitoring efforts in terms of its coverage of jurisdictions.

2.1. IOSCO PRINCIPLES RELATING TO SECONDARY AND OTHER MARKETS

The three IOSCO core objectives of securities regulation are: (i) The protection of investors, (ii) Ensuring that markets are fair, efficient and transparent; and (iii) The reduction of systemic risk. The three objectives are closely related and, in some respects, overlap.

The IOSCO Principles are one of the key standards and codes (including those on clearing and settlement) highlighted by the Financial Stability Board (FSB) as being key to sound financial systems and deserving priority implementation.

9

This *Methodology for Assessing Implementation of the IOSCO Objectives and Principles of Securities Regulation* ("Methodology") is designed to provide IOSCO's interpretation of Principles and to give guidance on the conduct of a self-assessment or third party assessment of the level of Principles implementation.

IOSCO has 38 Objectives and Principles of Securities Regulation (Principles) which provide core elements of a framework for securities regulations. The IOSCO Principles have been organized into several sections (a) Principles Relating to the Regulator; (b) Principles for Self-Regulation; (c) Principles for the Enforcement of Securities Regulation; (d) Principles for Cooperation in Regulation; (e) Principles for Issuers; (f) Principles for Auditors, Credit Rating Agencies, and Other Information Service Providers; (g) Principles for Collective Investment Schemes; (h) Principles for Market Intermediaries; (i) Principles for Secondary and Other Markets; and (j) Principles Relating to Clearing and Settlement.

The Principles for Secondary and Other Markets are:

- i. *Principle 33:* The establishment of trading systems including securities exchanges should be subject to regulatory authorization and oversight.
- ii. *Principle 34:* There should be ongoing regulatory supervision of exchanges and trading systems which should aim to ensure that the integrity of trading is maintained through fair and equitable rules that strike an appropriate balance between the demands of different market participants.
- iii. *Principle 35:* Regulation should promote transparency of trading.
- iv. *Principle 36:* Regulation should be designed to detect and deter manipulation and other unfair trading practices.
- v. *Principle 37:* Regulation should aim to ensure the proper management of large exposures, default risk and market disruption.

Principles 33 and 34 state the general standards for authorization of exchanges and trading systems and their ongoing supervision. Principles 35, 36 and 37 focus on specific regulatory objectives that are intended to promote market integrity. Secondary markets have been subject to many challenges over the past few years. Some technological developments such as algorithmic trading, direct electronic access, co-location, among others, have raised concerns regarding market integrity and efficiency. These concerns are present both in developed and emerging markets. The Principles intend to promote the objective of promoting fair, transparent and efficient secondary and other markets. In the wake of such concerns, it is important to help jurisdictions assess their laws and regulations.

2.2. Scope

This Review covers the implementation of Secondary and Other Market Principles (P 33 - 37), with the following key considerations underlying the scope of this work, being:

- i. The reforms relating to OTC Derivatives have been excluded from this work in order to avoid overlaps with work already being done in these areas; and
- ii. This work has been limited to authorized exchanges, in order to keep the scope of the project focused.

While the Methodology applies to "markets" in its widest sense, including trading systems other than traditional organized exchanges such as alternative trading systems (ATSs), multilateral trading facilities (MTFs), organized trading facilities (OTFs), and "proprietary" systems developed by intermediaries, this ISIM is limited to authorized exchanges and does

not cover other trading systems such as ATS, MTFs, OTFs and proprietary systems developed by intermediaries.

Principle 35 states that regulation should promote transparency. The Methodology for Principle 35 further states that where derogation from real time transparency is permitted, the market authority should have access to complete information to be able to assess the need for derogation. Regulators should be able to access information regarding dark orders. The information on dark pools has been covered in this review only in the context of derogations from real-time transparency, as referred under Principle 35.

3. OBJECTIVES, METHODOLOGY AND REVIEW TEAM

3.1. Nature of the Review and Objectives

The main objective of the Review is to provide a global overview of the status of implementation of each of these five Principles by the member jurisdictions, based on the self-assessments provided by member jurisdictions. The member jurisdictions indicated the legal and regulatory regimes in place regarding implementation of secondary and other market Principles (Principles 33 - 37). Specifically, the Review Team asked jurisdictions to identify the published and in-force source(s) of their legal authority consistent with the Principles. The Review also sought to identify differences in approaches and the progress of implementation (or proposed implementation) of the Principles.

The Assessment Methodology and Questionnaire used by the Review Team and sent to Participating Jurisdictions for self-assessment purposes is attached as Annexure-A (Assessment Methodology and Questionnaire). The Assessment Methodology and Questionnaire is based largely on the IOSCO Methodology.

The Review is based on progress reported by the jurisdictions (Participating Jurisdictions) as of 15 October, 2018.

The findings in this Report are based on analysis of self-assessments submitted by the participating member jurisdictions. Where necessary, the Review Team contacted participating jurisdictions to clarify and/or verify the statements made in the responses, however, the Review Team did not seek to assess independently all statements.

The Objective of this Review, as set out in the project specification approved by the IOSCO Board, is to deliver a final report which will:

- i. Set out the main findings on the status of implementation of secondary and other market Principles (P33-P37);
- ii. Identify gaps in implementation;
- iii. Identify good practices in implementation;
- iv. Identify any area which might be useful for IOSCO for future policy work, capacity building or technical assistance.

This work will not involve rating the jurisdictions against the benchmarks provided in the Methodology.

3.1.1. Review Team

The Review was conducted by a team comprised of staff from the following national authorities: Ms. Marian Kljakovic and Ms. Melissa Guo (Australian Securities and Investments Commission), Mr. Amarjeet Singh and Mr. Arjun Prasad (Securities and Exchange Board of India), Mr. Shoham Ben-Rubi and Ms. Zohar Levitan (Israel Securities Authority), Ms. Irene Tagliamonte (Commissione Nazionale per le Società e la Borsa, Italy), Ms. Khalida Habib, Ms. Tooba Akram , Mr. Ahsen Noor Malik and Mr. Abdul Mannan Mirza (Securities and Exchange Commission Pakistan), Mr. Jean Lorrain and Ms. Sharon Kelly (Autorité des Marchés Financiers Quebec), Ms. Anastasia Stepanyants (Central Bank of Russia) and Ms. Raluca Tircoci-Craciun, Ms. Hemla Deenanath and Ms. Anna Zhang (IOSCO General Secretariat) (**'Review Team'**).

Mr. Amarjeet Singh of SEBI led the Review Team.

3.2. Review Process

The Review was a desk-based exercise, using 39 responses provided by 40 IOSCO member jurisdictions to the Questionnaire designed by the Review Team based on the 2017 Methodology,¹⁰ developed by IOSCO. The Questionnaire was circulated on 27 July 2017, with responses due on 29 September 2017.

The respondent jurisdictions were asked to provide the status of implementation of the five Principles along with references to relevant legislation, regulation or policy, through a Questionnaire. These self-assessment responses became the primary source material for the Review Team's assessment.

Those jurisdictions which had undergone a Financial Sector Assessment Program (FSAP) assessment by the International Monetary Fund (IMF) / World Bank in 2012 or thereafter had the option of sharing their detailed self-assessment against Principles 33-37 (with additional updates) in lieu of filling out the ISIM Questionnaire.

4. Participating Jurisdictions

All IOSCO member jurisdictions were invited to participate in the Review. IOSCO Board members as well as Assessment Committee members were expected to participate in this Review. A total of 40 IOSCO members contributed to the Review, out of which 23 are also members of IOSCO Board. A list of participating jurisdictions is set out at **Annexure 1**.

The distribution of members based on IOSCO four regions:¹¹

¹⁰ Methodology for Assessing Implementation of the IOSCO Objectives and Principles of Securities Regulation available at <u>http://www.iosco.org/about/?subsection=key_regulatory_standards</u>

¹¹ Africa and Middle East Regional Committee (AMERC); Asia- Pacific Regional Committee (APRC); European Regional Committee (ERC); and Inter-American Regional Committee (IARC)

Region	Questionnaire	FSAP (with updates)	Country Review (with updates)	Total
AMERC	9 ¹²	1 ¹³	-	10
APRC	4^{14}	5 ¹⁵	1 ¹⁶	10
ERC [#]	9 ¹⁷	2^{18}	-	11
IARC	7^{19}	2^{20}	-	9
Total	29	10	1	40

EU member jurisdictions that participated in ISIM are: Croatia, Greece, Hungary, Ireland, Italy, Poland, Portugal and Romania.

Out of the 40-member jurisdictions participating in this ISIM, the following jurisdictions have been identified by the IMF as being systemically important financial sectors:

- i. Ireland, Italy, Poland and Turkey (ERC region);
- ii. Australia, China, Hong Kong, India, Japan, Republic of Korea and Singapore (APRC region); and
- Brazil, Canada (Ontario and Quebec), Mexico and United States of America (Securities and Exchange Commission and Commodity Futures Trading Commission) (IARC region).

Out of the 40 members participating in this ISIM, 27 members are from growth and emerging market (GEM) jurisdictions and 13 members are from advanced markets.

4.1. Markets Covered

A brief description of the various markets and the list of authorized exchanges that are present in all the 40 participating member jurisdictions has been provided in **Annexure 2.** The ISIM responses are mainly addressing the implementation status of secondary market Principles with respect to securities markets. It may be noted that equity markets are the most common asset class being traded in all member jurisdictions, except Angola (only public debt is traded) and Albania (only government securities (debt) is traded).²¹

Additionally, several reform areas specifically relating to commodity derivatives markets within the secondary market Principles have also been considered in this ISIM.

¹² Abu Dhabi Global Markets, Angola, Dubai International Financial Centre, Egypt, Kuwait, Mauritius, Saudi Arabia, South Africa and UAE

¹³ Morocco

¹⁴ China, India, New Zealand, Thailand

¹⁵ Australia, Hong Kong, Japan, Republic of Korea, Singapore

¹⁶ Pakistan

¹⁷ Albania, Croatia, Greece, Hungary, Israel, Poland, Portugal, Romania and Turkey

¹⁸ Ireland and Italy

¹⁹ Argentina, Bahamas, Brazil, Canada, Chile and Mexico. Note Canada's response was jointly submitted by two IOSCO members – Ontario Securities Commission and Quebec Autorité des marchés financiers (AMF).

²⁰ US Securities and Exchange Commission and US Commodity Futures Trading Commission

²¹ In Angola, only public debts (government bills, notes and bonds) are traded on the Angolan Stock Exchange (BODIVA). In Albania only Government securities (debt) are traded. The Albanian Stock exchange was licenced on 3 July 2017. According to the decision of Albanian Financial Supervisory Authority (AFSA), in the first year of activity, the Stock Exchange' transactions will focus only on the trading of government securities. The stock exchange is at the phase of building up its infrastructure.

The regulatory structure of the participating member jurisdictions and size and complexity of markets differ from one jurisdiction to another and therefore a "one size fits all" approach may not apply. The characteristics of each member jurisdiction may be relevant while applying IOSCO Principles.

5. KEY FINDINGS – PRINCIPLE BY PRINCIPLE

5.1. Principle 33: The establishment of trading systems including securities exchanges should be subject to regulatory authorization and oversight

IOSCO Methodology

The methodology for *Principle 33* states that regulator's authorization of exchanges, including the review and approval of trading rules, helps to ensure fair and orderly markets. IOSCO's methodology also states that regulation should seek to ensure that investors are provided fair access to market facilities on a non-discriminatory basis; and they should promote market practices and structures that ensure fair treatment of orders and a reliable price formation process. *Principle 33* methodology further states that:

- Regulation should provide for assessment of initial and ongoing propriety and competence of the operator of an exchange (KQs 1 and 2);
- When the exchange is assuming principal, settlement, guarantee or performance risk, they must comply with prudential and other requirements designed to reduce the risk of non-completion of transactions (KQ 2(c)).
- Regulator should assess the reliability of all the arrangements made by the operator for the monitoring, surveillance and supervision of the exchange or trading system and its members or participants to ensure fairness, efficiency, transparency and investor protection, as well as compliance with securities legislation. The regulation should require an assessment of market's dispute resolution and appeal procedures or arrangements as appropriate, its technical systems standards and procedures related to operational failure, information on its recordkeeping system, reports of suspected breaches of law, arrangements for holding client funds and securities, if applicable, and information on how trades are cleared and settled (KQ 3(a)).
- There must be mechanisms in place to identify and address disorderly trading conditions and to ensure that contravening conduct, when detected, will be dealt with. Details of trading control mechanisms and assistance available to the regulator in circumstances of potential trading disruption on the market should be provided to the regulator (KQs 3(b) and (c)).
- When functions are outsourced, such outsourcing does not negate the liability of the outsourcing market for any and all functions that the market may outsource to a service provider. The outsourcing market must retain the competence and ability to be able to ensure that it complies with all regulatory requirements (KQ 3(d)).
- Regulator should, as a minimum requirement, be informed of the types of securities and products to be traded on the exchange or trading system, and should review/approve the rules governing the trading of the product, where applicable (KQ 4).
- The order execution rules, as well as any cancellation procedures, should be disclosed to the regulator and to market participants, and should be applied fairly to all participants (KQ 5).
- Information on completed transactions, trading information and rules and operating procedures should be available, and the regulator should verify that it is provided on an equitable basis to all similarly situated market participants (KQ 6).

5.1.1. Implementation Overview

Overall, a high level of implementation consistent with the principles has been observed with regard to implementation of Principle 33 by participating member jurisdictions. Nonetheless, the review noted certain gaps in implementation in a few nascent and emerging markets.

5.1.2. Trends

Authorization of exchanges (KQs 1, 2 (a), (b) and (d))

All the jurisdictions reported that regulatory frameworks are in place requiring authorization of exchanges. While in most of the jurisdictions, the authorization is provided by the regulator, there are several²² jurisdictions in which authorization of exchanges is granted by the Ministry or through law.

The *criteria for authorization* of exchanges that have been commonly observed across many jurisdictions are, operational requirements (including technical systems for trading facilities), addressing conflicts of interest, business rules and operational procedures, fairness and transparency requirements etc. Though not specifically mentioned in the Methodology, some jurisdictions also have additional requirements such as minimum capital requirements, fit and proper person criteria, imposing trading restrictions, seeking public comments before granting registration and checks on quality of significant persons.

Some examples are as follows:

- i. *Trading restrictions:* The US Securities and Exchange Commission (US SEC) requires that an exchange must demonstrate that its members are not permitted to trade for their own accounts, for the accounts of an associated person, or for accounts with respect to which an associated person exercises investment discretion unless a specific exemption is available (such as transactions by broker dealers acting in the capacity of a market maker).
- ii. *Seeking public comments*: The US SEC must publish notice of the application for public comment and, generally within 90 days of publication, by order grant the registration or institute proceedings to determine whether the application should be denied.
- iii. Quality of significant persons: In Italy, during the authorization process Commissione Nazionale per le Società e la Borsa (Consob) shall verify, among others, that the persons directly or indirectly exercising significant influence over the management of a regulated market satisfy integrity requirements and the persons performing administrative, managerial or control functions in market operators, satisfy the integrity and experience requirements set forth in the regulations issued by the Ministry of Economy and Finance. In particular, Consob shall refuse authorization if it is not satisfied that the members of the management body of the market operator are of sufficiently good repute, possess sufficient knowledge, skills and experience and commit sufficient time to perform their functions, or if there are grounds for believing that the management body of the market operator may pose a threat to its effective, sound and prudent management and to the integrity of the market. In

²² Angola, Australia, China, Israel, Mexico, Morocco, New Zealand, Portugal and Saudi Arabia

making this assessment Consob is required to take into account the Guidelines issued by ESMA under Article 45(9) of Directive 2014/65/EU (MiFID II).

Cross-border recognition

While cross border recognition does not figure in the Key Questions, the explanatory notes to Principle 33 state that a regulator may recognize an exchange established in another jurisdiction. Some participating jurisdictions have voluntarily indicated that they have a framework for recognizing exchanges established outside their jurisdictions. These instances are highlighted at **Annexure 3**.

Settlement requirements [KQ 2(c)]

The risks of non-completion of transactions are primarily addressed through prudential requirements (capital, margin, etc.) for market participants. Most jurisdictions have reported having a designated central counterparty which alleviates the need for the registered exchange to assume settlement or performance risks. A majority of jurisdictions also mandate participant contributions to a guarantee fund to compensate investor losses.

Supervision of exchanges [KQ 3(a)]

All the jurisdictions require the regulator to play an active role in maintaining market integrity. All the jurisdictions reported having regulatory frameworks for: (a) supervision of exchanges; and (b) ensuring monitoring and surveillance of trading activities by exchanges.

Most of the jurisdictions reported having regulatory frameworks for exchanges to have:(a) Dispute resolution and appeal procedures; (b) Technical systems and standards and procedures related to operational failure; (c) Record keeping systems; (d) Reports of suspected breaches of law; (e) Arrangements for holding client funds and securities, if applicable; and (f) Information on clearing and settlement of trades. In case of Abu Dhabi Global Markets (ADGM), the dispute resolution and appeal process for exchanges have been introduced recently in 2018, during the conduct of ISIM.

The risks arising out of technical systems related to operational failure are particularly important today in the context of increasing technological innovation. Many jurisdictions reported having systems and processes in place to prevent or respond to technology or system failure such as reporting of incidents of system failure, guidelines for technology risk management (e.g., Singapore) annual independent assessment of IT by exchanges (e.g., China, Italy), written policies and procedures reasonably designed to ensure that systems have adequate levels of capacity, integrity, resiliency, availability, and security (e.g., Regulation on *Systems Compliance and Integrity*, US SEC). The area continues to command regulatory attention and reflection on adequacy of capacity to respond efficiently to operational failures arising out of technical systems.

Trading control mechanisms [KQ 3(b) and (c)]

Most²³ of the jurisdictions reported to have *trading control mechanisms* for dealing with market volatility. The most common trading control mechanism is trading halts, whereby trading of securities is interrupted where there is excessive market volatility. In circumstances of potential trading disruption, the regulatory framework provides for assistance being provided to the regulator by the exchanges in most²⁴ jurisdictions.

In Italy, trading venues are subject to mandatory requirements for systems resilience (including the ability to deal with peak order and message volumes and reject orders that exceed thresholds or are erroneous, halt or constrain orders and cancel, vary and correct transactions), circuit breakers, electronic trading and tick size regimes, which are intended, among others, to address risks posed from algorithmic trading and direct electronic access.

In Hong Kong, additional measures have been taken to control excessive market volatility. In order to prevent extreme price volatility from trading incidents such as a "flash crash" and algorithmic errors, the Hong Kong Exchanges and Clearing Limited (HKEX) implemented the Volatility Control Mechanism ("VCM") for its securities and derivatives markets. The VCM has a reference to a dynamic price to capture rapid and large price movements. The VCM is triggered if a stock (contract) is $\pm 10\%$ ($\pm 5\%$) away from the last traded price 5 minutes ago. After the trigger, the cooling off period is for 5minutes wherein the trading is allowed within the pre-defined price band and thereafter normal trading resumes.

An interesting example from one jurisdiction (China), where excessive market volatility occurred in 2015 and 2016 and the circuit breaker was unsuccessful, has been placed at **Annexure 4**.

In case of Egypt and Saudi Arabia, trading control mechanisms have been adopted recently in 2018, during the conduct of ISIM.

Outsourcing [KQ 3(d)]

Regarding *outsourcing*, most²⁵ of the jurisdictions reported that the market authority (regulator and/or SRO) has access to the books and records of the outsourced service providers. Some examples of outsourcing guidelines recently issued by jurisdictions are:

i. In India, Securities and Exchange Board of India (SEBI) has issued detailed guidelines through a legally binding circular in September 2017 on broad principles to be followed by Stock Exchanges during outsourcing of activities. The core and critical activities of stock exchanges shall not be outsourced. The outsourcing arrangement should provide for the access by the regulatory authority of the records of service providers/ outsourcing agencies and other information relating to the activities that are relevant to regulatory oversight.

²³ Except ADGM, Albania and Bahamas. In case of ADGM, since there is no exchange in ADGM, there is no trading control mechanisms in place. However, their regulatory framework provides for over-arching rule requiring an exchange to have procedures which enable the exchange to influence trading conditions or suspend trading promptly when necessary to maintain an orderly market.

²⁴ Except Albania, Bahamas, Chile, Romania and UAE

²⁵ Except Argentina and Bahamas

ii. In Singapore, the Monetary Authority of Singapore (MAS) issued revised Guidelines on Outsourcing to financial institutions in July 2016. The revised Outsourcing Guidelines continue to impose expectations upon a financial institution which has entered or intends to enter into an outsourcing agreement to maintain an appropriate level of monitoring and control over the outsourcing, include clauses in the outsourcing agreement to allow the financial institution to conduct audits on the service provider, obtain copies of any reports and findings on the service provider, allow MAS or any agent appointed by MAS to access both the service provider and the institution to obtain records and documents, including reports and findings on the service provider.

Admission of securities and commodity derivatives for trading (KQ4)

In relation to admission of securities products for trading, all regulators have reported that they are informed of the types of securities for admission and have control over their admission on exchanges. Further, in all the member jurisdictions, the product design is taken into account in order to admit a product for trading.

Commodity derivatives markets are absent in many jurisdictions.²⁶ Two jurisdictions²⁷ are in the process of developing framework for commodity derivatives. In all jurisdictions having commodity derivatives markets, (except Chile) the regulator approves the rules governing the admission of the products to be traded.

Fairness of Order Execution Procedures (KQ 5)

On *order execution*, all jurisdictions except Albania reported that the order routing procedures and execution rules are disclosed to the regulators and market participants and the order execution rules and procedures ensure fair access and orderly trading. Several regulators responses' to high-frequency and algorithmic trading include implementation of rules on co-location which aim to set a level playing field by requiring regulatory review of the rules and/or additional fees to be charged for augmented access. Most jurisdictions mandate stock exchanges to provide equal terms of access to all participants within a chosen access facility. Some examples of co-location frameworks in the USA, Hong Kong, European Union (EU) region, Canada (Ontario and Quebec), Australia, Singapore and India can be found at **Annexure 5**.

Most²⁸ of the jurisdictions reported having *pre-trade controls* for management of risk with regard to fair and orderly trading.

Operational Information (KQ 6)

All the jurisdictions except Albania have specified that they have the following requirements relating to operational information about exchanges:

i. Equitable access of market rules and operating procedures.

²⁶ Angola, Albania, Bahamas, Chile, Croatia, Egypt, Greece, Ireland, Israel, Kuwait, Mauritius, Mexico, Morocco, Poland, Romania, Saudi Arabia

²⁷ Egypt and Kuwait

²⁸ Except Albania and Kuwait

- ii. Adequate records for reconstructing trading activity within a reasonable time.
- iii. Systems capable of disclosing the required information and also preserving the confidentiality of information which is not intended to disclosure.
- iv. Pre-trade and post-trade information to market intermediaries on real time basis.

5.1.3. Gaps in Implementation

The following gaps in implementation have been identified in this Principle:

- i. While most regulators provide *authorization* to the exchange based on criteria for authorization, gaps in implementation have been identified in two jurisdictions:
 - a) In Saudi Arabia, the Saudi Stock Exchange is the sole entity authorized by The Capital Market Law to carry out trading activities on securities in the Kingdom of Saudi Arabia. The law does not allow for any new exchange to be established and there are no criteria (rules, procedures or guidance) for establishment of exchange.
 - b) In Bahamas, while there are criteria for authorization, the regulator has specified that the criteria for authorization does not require analysis of the market by the regulator.
- ii. Albania and Bahamas do not have adequate *trading control mechanisms for dealing with market volatility.* In **Bahamas**, while Securities Commission of Bahamas (SCB) has reported that their regulation requires the marketplace to have appropriate and sufficient systems and controls to perform its functions and manage its risks prudently, it appears that the exchange does not have specific trading control mechanisms.
- iii. In Morocco, while the exchange has trading halts in case there is a significant activity in a given security, there is no provision for a *general suspension of all trading*.
- iv. Some jurisdictions (Albania, Bahamas, Romania and UAE) have reported that they are not compliant with respect to the requirement that *assistance be available to the regulator in circumstances of potential trading disruption on the system*.
- v. In Argentina and Bahamas, the regulators have no access to the books and records of service providers relating to an exchange's *outsourced activities*.
- vi. In Chile, derivatives other than options on listed shares are *outside the perimeter of regulation*. The Chilean Authority does not regulate nor monitor derivative markets (except for options on listed shares), since derivatives (other than those options) are not considered as securities.
- vii. In Albania and Bahamas, the regulator does not *review the trading matching algorithm* of automated trading systems.
- viii. In Albania and Kuwait, there are no *automated pre-trade controls*.

- ix. Further, Kuwait has specified that they do not have *sufficient prudential arrangements*. CMA has stated that their Board has resolved to initiate the capital adequacy project which will provide prudential requirements.
- x. In Bahamas, the regulator does not have sufficient control over *admission of financial products* to be traded on exchange.
- xi. Further, Albania has reported that they do not have minimum requirements prescribed under this Principle relating to *trading information*, such as providing member intermediaries with access to relevant pre-and post-trade information (on a real-time basis) to enable these intermediaries to implement appropriate monitoring and risk management controls.
- 5.2. Principle 34: There should be ongoing regulatory supervision of exchanges and trading systems which should aim to ensure that the integrity of trading is maintained through fair and equitable rules that strike an appropriate balance between the demands of different market participants.

IOSCO Methodology

Orderly, smooth functioning markets promote investor confidence. Accordingly, there should be ongoing supervision of the markets. The regulator must remain satisfied that the conditions thought to be necessary pre-requisites of authorization remain in place during operation.

The *Principle 34* methodology states that the regulatory system should include a program whereby the regulator or SRO (which is subject to oversight by the regulator) monitors day-to-day trading on the exchange; monitors conduct of market intermediaries; and collects and analyzes the information gathered from these activities (KQ 1). Further, the *Principle 34* methodology states that amendments to the rules or requirements of the authorized exchange or regulated trading system should be provided to, or approved by, the regulator (KQ 2).

Authorization of the authorized exchange or regulated trading system should be re-examined, or withdrawn, when it is determined that the system is unable to comply with the conditions of its authorization, or with securities law or regulation (KQ 3).

5.2.1. Implementation Overview

The ISIM review found that most member jurisdictions have in place: (a) necessary monitoring mechanisms through surveillance programs and onsite inspections of market intermediaries and exchanges; (b) regulatory systems providing the necessary powers to access all trading information; and (c) the authority to take enforcement actions against the exchanges.

While ongoing supervision is ensured in most jurisdictions, gaps have been observed mainly in relation to the authority to withdraw the authorization of an exchange. Some member jurisdictions do not have the necessary authority to withdraw the authorization, the withdrawal being done in these cases either by the Ministry of Finance or by law.

5.2.2. Trends

Monitor day-to-day trading (KQ 1(a))

All the member jurisdictions have reported that they monitor day-to-day trading with many jurisdictions providing details about online/automated systems for real-time surveillance. Market surveillance is conducted at the level of the exchange, the regulator and/or the SRO.

As reported, in Canada, the surveillance system is undergoing enhancement of analytical capabilities by supporting better data mining, visualization and deployment of new tools, including machine learning and artificial intelligence.

The US SEC, in 2016, approved a national market system (NMS) plan to create, implement, and maintain a market-wide consolidated audit trail (CAT) that captures customer and order event information for orders in National Market System (NMS) securities across all markets, from the time of order inception through routing, cancellation, modification, or execution in a single, consolidated data source (CAT NMS Plan). The CAT NMS Plan should improve the quality of order data and should allow regulators to more efficiently carry out their regulatory activities.

In India, SEBI's Integrated Market Surveillance System (IMSS) and Data warehouse & Business Intelligence System (DWBIS) integrates the data from across the recognized stock exchanges and depositories for the purpose of market surveillance.

The Israel Securities Authority (ISA), operates a market surveillance and data analysis system using "Business Intelligence" (BI) technology. This system is not only intended to expose unusual market activity, such as market abuse and use of inside information, but also unusual or prohibited investment activity of principal shareholders, institutional investors and mutual funds through cross-referencing information with other ISA data bases.

The market surveillance systems in Canada, USA, Israel and India are further elaborated at **Annexure 6** along with a brief on surveillance systems in other jurisdictions viz. Argentina, Hong Kong, Japan and Portugal.

Supervision of market intermediaries (KQ 1(a))

All the jurisdictions have reported that they have the regulatory framework for supervision of market intermediaries. However, where there are parallel systems of supervision by regulators/ SROs and exchanges, this creates the need for appropriate levels of coordination between them to minimize the compliance burden on firms, to ensure efficiency in the use of regulatory resources and to ensure effective cooperation and sharing of information.

Supervision of exchanges (KQ 1(b))

All the member jurisdictions have the regulatory framework for conducting supervision of the exchanges. The supervision of exchanges is conducted through various mechanisms such as conducting on-site inspection of the systems and processes, periodic compliance meetings between regulator and exchanges, independent audit of exchanges, periodic reporting with regulators etc.

It is interesting to note that in Canada (Ontario and Quebec), exchanges are monitored by the lead securities regulator (or two joint lead regulators), pursuant to the MoU on the oversight

of exchanges and quotation and trade reporting systems, signed by six provincial securities regulators, through onsite and offsite examination programs (according to a risk-based approach). Regulators have full access to information (including pre- post-trade, audit trials, outsourcing etc.).

Regulator's access to all pre-trade and post-trade information (KQ 1(c))

All the member jurisdictions reported to have regulatory system that provides the regulator with adequate powers to access all trading information. For instance, in the EU, under MiFID competent authorities receive full information concerning trading on financial instruments admitted to trading on a trading venue, whether or not these transactions are carried out on a trading venue or OTC. Under MiFID2 these rules are further strengthened.

Amendments to the rules or requirements of the exchange (KQ 2)

All the jurisdictions reported that their regulatory framework provides that amendments to the rules or requirements of the exchange must be provided to, or approved by, the regulator. In one jurisdiction (Morocco), the rules of the exchange are approved by the Ministry of Finance after consultation with Autorité Marocaine du Marché des Capitaux (AMMC).

Enforcement actions against exchanges (KQ 3)

All the jurisdictions reported having authority to take certain *enforcement actions* against the exchanges. Further, in most of the jurisdictions, the regulator has the authority to withdraw exchange authorization.

5.2.3. Gaps in implementation

Gaps in implementation have been mainly observed with regard to the *inability to withdraw the exchange license*, ²⁹ as necessary.

- i. In *Saudi Arabia*, the regulator does not have the authority to withdraw the exchange authorization. Any change in the status of such exchange has to be done through the law by the issuance of a royal decree. Further, the CMA Saudi Arabia has the power to suspend the Exchange's activities for a period of not more than one day; and in cases where the CMA or the Minister of Finance deems it necessary to suspend the Exchange's activity for more than one day, the approval of this decision must be issued by the Minister of Finance.
- ii. In *Egypt*, the regulator does not have the provision for withdrawal of exchange authorization.³⁰
- iii. In *Morocco*, the authority to withdraw the authorization is with Ministry of Finance. The Ministry may withdraw the authorization of the exchange management company if, after receiving a warning, it continues to violate the legal and regulatory provisions of the stock market.

²⁹ Egypt, Morocco, Saudi Arabia and Thailand

³⁰ Egypt is in the process of preparing new legislations to introduce the derivatives market in Egypt which shall allow the revocation of license of an exchange. However, in the spot market the regulator does not have the provision for withdrawal of exchange authorization.

iv. In *Thailand*, revocation of license of an exchange can be done only in the case of the derivatives exchange. For the spot market, in case of the existing stock exchange, the Securities and Exchange Commission (SEC) does not have the same authority. Further, the Securities and Exchange Act (SEA) has given power to the SEC Board to (a) suspend trading of the whole market for a specified period deemed as reasonable; (b) remove the Stock Exchange of Thailand (SET) Board, and (c) order SET to issue additional rules, revoke, alter, or modify existing rules in the interest of public/investors.

Out of the above mentioned 4 jurisdictions, interestingly 3 jurisdictions (Saudi Arabia, Egypt and Morocco are from the AMERC region.

Additional gaps with Principle 34 are regarding the day-to-day monitoring of the trading activity on the exchange. In *Bahamas*, it is unclear whether the day-to-day monitoring by the regulator exists in the Bahamas.

5.3. Principle 35: Regulation should promote transparency of trading

IOSCO Methodology

Pre-trade and post-trade transparency enhance fairness and investor protection by making it easier for investors to monitor the quality of executions that they receive from their intermediaries. Transparency can also help to promote market efficiency (KQ 1). The wide availability of information on bids and offers is a central factor in ensuring price discovery and in strengthening users' confidence that they will be able to trade at fair prices. This confidence should in turn, increase the incentive of buyers and sellers to participate; facilitate liquidity; and stimulate competitive pricing.

The *Principle 35* methodology also states that where a market authority permits *some derogation from the objective of real-time transparency*, either pre-trade or post-trade, the conditions should be clearly defined and the market authority (being either, or both, the exchange operator and the regulator) should have access to the complete information to be able to assess the need for derogation and, if necessary, to prescribe alternatives (KQ 2). The *Principle 35* methodology further states that regulators should periodically monitor the development of *dark pools and dark orders* in their jurisdictions to seek to ensure that such developments do not adversely affect the efficiency of the price formation process, and take appropriate action as needed. Transparent orders should have priority over dark orders at the same price within the same trading venue (KQs 2 (c), (d) and (e)).

5.3.1. Implementation Overview

All the jurisdictions across regions reported to have regulatory frameworks that define the rules and regulation for providing pre-trade and post-trade information. Moreover, all the jurisdictions have adequate arrangements to provide information to all participants on completion of transactions.

5.3.2. Trends

Pre-trade and Post-trade transparency (KQ 1)

All the participating jurisdictions have reported that their regulatory systems provide for general transparency requirements, whether through legislation or through rules and regulations. In some jurisdictions,³¹ while they have the provisions for pre-trade and post-trade transparency, there is no explicit legal requirements.

Derogations from real-time transparency (KQ 2)

Most of the jurisdictions reported having permitted *derogations from real-time transparency*.³² The jurisdictions that permit derogations from real-time transparency have specified that they have clearly defined conditions and the market authority has access to complete information on the same.

In one jurisdiction (Republic of Korea), blocks are reported at the end of the trading day, but only the volume not the price of the block is reported. The FSAP noted that even with a pricing formula, this reporting model does not meet international best practices with respect to transparency, because the price of the transactions is not reported. Further, the block size is very small and uniform for all shares independent of their liquidity, which raises further questions as to the overall purpose of this trading vehicle. Despite the deficiencies of the block trading regime, this Principle was assessed as Fully Implemented in the FSAP due to the low volume of block trading. However, FSAP recommended that further work should be undertaken to address the deficiencies of the current block trading regime.

For EU jurisdictions, as a general note, common rules for waivers to transparency are set out in Markets in Financial Instruments Directive (MiFID) and recently reviewed and upgraded in MiFID II (into force applicable as of 3 January 2018).

Dark Orders³³

There are 16 jurisdictions that do not permit dark orders. There are 20 jurisdictions in which pre-trade transparency waivers giving rise to *dark orders* are permitted in lit exchange

³¹ Hong Kong, Pakistan and South Africa:

In Hong Kong, although there is no explicit statutory requirement for the provision of pre-trade and post-trade information to market participants, the SFC requires the exchanges to provide appropriate levels of transparency in relation to pre-trade and post-trade information on a timely and equitable basis.

In Pakistan, while there is no legislative authority for transparency, the 2015 Country Review of Pakistan by IOSCO found that the system functions effectively to provide transparency, both pre-trade and post-trade. In South Africa, there are no specific legislative requirements regarding dissemination of orders to the market however the Johannesburg Stock Exchange (as SRO) maintains appropriate arrangements.

³² Except Angola, Argentina, Brazil, China, India, New Zealand, Saudi Arabia and Thailand. In case of Turkey, derogations is permitted in equity but not for derivatives.

³³ In some jurisdictions dark orders operate under an authorized exchange and therefore information related to dark orders was part of the jurisdiction's response to the questionnaire. In other jurisdictions, dark orders may not operate within the authorized exchange. The information in this report is based on the jurisdictions' responses.

markets.³⁴ While most of the jurisdictions having dark orders have specified that transparent orders are given priority over dark orders, some jurisdictions (Republic of Korea, Poland, Mexico and Turkey) have mentioned that the dark orders and transparent orders are in different order books and there is no question of priority between transparent and dark orders on the same trading venue.



Dark Pools

There are 19 jurisdictions in which *dark pools* are permitted and 19 jurisdictions have specified that they do not permit dark pools.³⁵

34

In Romania, the regulator ASF may exonerate the market operator from the obligation to make public the information regarding current prices and current sales and purchase amounts for financial instruments admitted to trading, taking into account the market model, the type and size of the orders and the trading of a large volume compared to the normal market volume of the financial instruments concerned (art. 47 and 49 of Regulation no. 2/2006)". Information is not available for remaining 3 (Albania, Chile and Greece) jurisdictions.

³⁵ Jurisdictions that allow dark pools are: ADGM and DIFC from AMERC region; Australia, Hong Kong, Japan, Republic of Korea, and Singapore from APRC region; Croatia, Greece, Hungary, Ireland, Italy, Poland, Portugal, Romania, Turkey from ERC region; and Canada (Ontario and Quebec) and US SEC from IARC region.

Jurisdictions that allow dark orders are: ADGM, Egypt, South Africa and UAE from AMERC region; Australia, Japan, Republic of Korea, New Zealand and Pakistan from APRC region; Croatia Ireland, Israel, Italy, Poland, Portugal, Turkey from ERC region; and Canada (Ontario and Quebec), Mexico, US SEC from IARC region Jurisdictions that do not allow dark orders are: Angola, DIFC, Kuwait, Mauritius, Morocco, Saudi Arabia from AMERC region, China, Hong Kong, India, Singapore, Thailand from APRC region; Hungary from ERC region; and Argentina, Bahamas, Brazil and US CFTC from IARC region.

Jurisdictions that do not allow dark pools are: Angola, Egypt, Kuwait, Mauritius, Morocco, Saudi Arabia, South Africa, UAE from AMERC region; China, India, Pakistan and Thailand from APRC region; Israel from ERC region; and Argentina, Bahamas, Brazil, Chile, Mexico, US CFTC from IARC region.

Albania did not provide response. In New Zealand, while dark pools are not currently operated by NZX, they are not prohibited.



Only one of the participating jurisdictions from AMERC region permits dark pools, whereas in ERC region most of the participating jurisdictions have permitted dark pools. As mentioned, in EU dark pools are commonly regulated under the MiFID framework.

All the jurisdictions having dark pools have specified that they have a regulatory framework for monitoring dark pool activities. Examples of two jurisdictions, US and Singapore on dark pools are as follows:

- i. In the USA, under Regulation ATS, an entity that falls within the definition of an exchange may register as an exchange or as a broker-dealer and comply with Regulation ATS. If an entity chooses to be an alternative trading system (ATS), it must register as a broker-dealer, fulfill all of the registration requirements, be a member of an SRO (e.g., FINRA) and comply with certain reporting and recordkeeping requirements set forth in Regulation ATS. The US SEC recently adopted rules to enhance operational transparency and regulatory oversight of ATSs that trade stocks listed on a national securities exchange (NMS stocks), including dark pools.
- ii. In Singapore, dark pool operators for Singapore listed securities are regulated as Recognized Market Operator (RMOs), and are subject to recognition conditions, including conditions to report trades in such securities to Singapore Exchange Securities Trading Limited (SGX-ST) in accordance with SGX-ST Rule 8.7 on direct business. The rule specifies the conditions under which off-market trades for Singapore-listed securities may be executed and the maximum time limit for reporting such off- market trades. Sections 20 and 38 of the Securities and Futures Act (SFA) set out the requirement for approved exchanges and RMOs to afford MAS full access to their books (which includes any record, register, document or other record of information, and any account or accounting record). Where necessary, MAS has the powers to issue directions, under section 46 of the SFA, to approved exchanges and RMOs.

5.3.3. Gaps in Implementation

In **South Africa**, there are no requirements for transparent orders to have priority over dark orders.

5.4. Principle 36: Regulation should be designed to detect and deter manipulation and other unfair trading practices.

IOSCO Methodology

The regulator must ensure that there are in place arrangements for the continuous monitoring of trading. These arrangements should trigger inquiry whenever unusual and potentially improper trading occurs. Market authorities should have rules, compliance programs, sanctioning policies and powers to prohibit, detect, prevent and deter abusive practices on their markets, including manipulation (or attempts at manipulation) of the market (KQs 1, 2 and 3). The Principle 36 methodology states that an effective and credible market oversight program should include robust powers (general or specific) over fraud, market manipulation or attempts at such manipulation (KQ 2(b)).

Particular care must be taken to ensure that regulation is sufficient to cover cross-market conduct where, for example, the price of an equity product could be manipulated through the trading of options, warrants or OTC derivatives or other derivative products (KQ4). The regulator should also work collectively and take any steps that would be appropriate to strengthen its cross-border surveillance capabilities (KQ5).

The Principle 36 methodology also states that authorities responsible for the supervision of commodity derivatives markets (e.g., either the market, a governmental regulator or an SRO) should have the authority to access information on a routine and non-routine basis that permits them to reconstruct transactions, identify large concentrations of positions, and the overall composition of the market, including the power to access on an "as needed basis" information on the size and beneficial ownership of a trader's related financial and underlying market positions in order to aggregate positions held under common ownership and control (KQ6).

Finally, the market authority should also have the organizational and technical capabilities to monitor effectively the exchanges it supervises, including the ability to identify market abuse and activities that may impact the fairness and orderliness of trading on such exchanges (KQ7).

Considering that ISIM is largely based on self-assessments, the ISIM review is limited to considering the regulatory frameworks in place for sanctions for market manipulations and does not extend to commenting on the effectiveness of these frameworks.

5.4.1. Implementation Overview

The ISIM review found that all member jurisdictions reported to have regulatory frameworks that prohibit unfair trading practices and all responses reported they have the competence and ability to supervise, monitor and scrutinize all the trading activities carried out on-exchange.

While surveillance of listed equity trading is being conducted by all the member jurisdictions, some members have identified certain limitations in enforcement against market manipulations.

5.4.2. Trends

Regulatory frameworks that prohibit unfair trading practices (KQ 1)

All member jurisdictions reported having *regulatory frameworks that prohibit unfair trading practices* including price manipulation, insider trading, front running, use of misleading information or other deceptive conduct. In EU jurisdictions, the Market Abuse Regulation ("MAR") applies. MAR contains provisions that prohibit insider dealing, unlawful disclosure of inside information, and market manipulation. In general, EU jurisdictions draw on a combination of MAR and other domestic laws to demonstrate their compliance with this key question.

Market surveillance (KQ2 (a) and 3)

In order to detect unfair trading, surveillance systems are already in place in all jurisdictions (except Albania) where exchanges are present (see above Principle 34). Most of the jurisdictions have reported having a combination of mechanisms such as direct surveillance, inspection, reporting, market halts, limit settlement prices etc. to detect and deter market manipulation.

All jurisdictions³⁶ except Albania have reported that they have arrangements for: (a) continuous collection and analysis of information concerning trading activities; (b) providing the results of such analysis to market and regulatory officials in a position to take remedial action if necessary; (c) monitoring the conduct of market intermediaries participating in the market(s); and (d) triggering further inquiry as to suspicious transactions or patterns of trading.

The ISIM review found that frameworks supplement their market surveillance systems with other mechanisms. For example, some jurisdictions' intermediary rules require information barriers ('Chinese Walls') to be installed between buy- and sell-side to reinforce the prohibition of trading on insider information.

Chinese wall between proprietary trading and client trading: In China, Securities companies must have effective information barriers and the CSRC's Guidelines on Internal Control for Securities Companies require securities companies to establish a sound Chinese wall system between their primary business departments, so as to ensure that businesses relating to brokerage, proprietary trading, and entrusted investment management, investment banking, and research and consultancy are independent of one another. Own account trading and client trading must be carried out from different trading seats. A breach of all these obligations could be pursued as a breach of clients' interest but also potentially as insider trading.

Sanctions for violations (KQ 2(b))

All the jurisdictions have specified that they have the regulatory frameworks in place to impose sanctions regarding unfair trading practices executed by the market participants. The range of actions that can be imposed by the regulators are imposing monetary penalties, debarment from participation in securities markets, suspension of registration, criminal

36

In case of ADGM, it has been reported that they do not have a fully operational exchange at this point in time. ADGM is preparing for the installation of a markets surveillance system (across securities and derivatives markets).

sanctions etc. A description of the criminal sanctions by various jurisdictions has been brought at **Annexure 7.**

Cross market Trading (KQ 4)

With respect to *cross-market surveillance*, several³⁷ jurisdictions have specified that there is no cross-market trading in the jurisdiction, with some jurisdictions explaining that they have only one exchange and therefore no potential for cross-market trading. Nevertheless, some jurisdictions have provided details about cross-market surveillance that can exist even if the securities are listed at only one exchange. Examples of Ireland and Italy are provided below:

- i. *Cross-market surveillance:* There is potential for domestic cross-market trading across regulated markets and multilateral trading facilities (MTFs) within Ireland. The Central Bank of Ireland has the capacity to monitor domestic cross market trading on a post trade basis through the use of transaction reports that are submitted via the transaction reporting and exchange mechanism (TREM).
- ii. *Cross-market surveillance Derivatives:* Italy noted that a segment of the derivatives regulated market managed by Borsa Italiana S.p.A. (IDEM) is dedicated to the trading of commodity futures on energy (IDEX). CONSOB has also approved the proposal by Borsa Italiana S.p.A. to launch a commodity futures market on agricultural products (AGREX). CONSOB is the competent authority for the supervision of those financial commodity derivatives markets. CONSOB has direct access to the information that permits to identify concentrations of positions in derivatives, while the Autorità per l'energia elettrica e il gas (AEEG) is the competent authority for the supervision of the underlying energy market, where the reference price for the financial futures contracts is determined. On 8 August 2008, CONSOB and AEEG signed a memorandum of understanding (MoU) for the exchange of the relevant information between the two authorities.

Cross market trading – Multiple exchanges. Some jurisdictions have indicated that they have formal arrangements for information sharing for addressing cross-market abuses. Examples of arrangements in some jurisdictions having multiple exchanges are as follows:

- i. In the USA, there are mechanisms for information sharing and surveillance among the markets. The Intermarket Surveillance Group (ISG) is an industry organization created in 1983 to coordinate intermarket surveillance among the SROs by cooperatively sharing regulatory information pursuant to a written agreement between the parties. The goal of the ISG's information sharing is to coordinate regulatory efforts to address potential intermarket trading abuses and manipulations.
- ii. In Canada (Ontario and Quebec), equity trading can be done through multiples exchanges (and ATSs) while many securities are also listed on foreign exchanges, mainly in the United States. In addition, for options trading on the Bourse de Montréal (MX) the underlying is traded on stock exchanges and ATSs. Investment Industry Regulatory Organization of Canada (IIROC), an SRO, monitors trading of securities on and across all equity exchanges and ATS to ensure compliance with the UMIR that

³⁷ ADGM, Bahamas, Brazil, Hong Kong, Hungary, Mauritius, Mexico, Morocco, New Zealand, Poland, Republic of Korea, Saudi Arabia and Turkey. In case of ADGM, it is a newly established jurisdiction with no cross-market trading.

govern equity trading activity in Canada. IIROC uses a technology system knows as the Surveillance Technology Enhancement Platform (STEP) which offers a consolidated view of all equity trading on all Canadian marketplaces. Finally, the MX and IIROC have signed a MoU which provides amongst others for the sharing of information and cooperation on enforcement for example.

iii. In China, China Financial Futures Exchange (CFFEX), Shanghai Stock Exchange (SSE), Shenzhen Stock Exchange (SZSE), China Futures Market Monitoring Center (CFMMC) and China Securities Depository and Clearing Corporation Limited (CSDC) have established cross-market regulatory cooperation mechanisms on stock index futures and treasury bond futures, and have adopted day-to-day cross-market information exchange to coordinate front-line supervision and strictly crack down on violations and illegal actions. In addition, the China Securities Regulatory Commission (CSRC), the Ministry of Finance of China, the People's Bank of China, and China Banking and Insurance Regulatory Commission (CBIRC) have established joint ministerial coordination among different ministries. Cross-exchange trading in futures does not occur because each futures product is only allowed to be listed on one futures exchange.

Besides, China Securities Regulatory Commission (CSRC) and Securities and Futures Commission (SFC), Hong Kong have entered into a Memorandum of Understanding (MoU) in October 2014 on strengthening cross-boundary regulatory and enforcement cooperation under Shanghai Connect. The MoU facilitates sharing of information and data, joint investigations and enforcement. The scope of this arrangement between the two regulators has been subsequently extended to include Shenzhen Connect. The main features of the Shanghai and Shenzhen Connect are highlighted at **Annexure 8**.

Cross border cooperation (KQ 5)

All the jurisdictions, except Chile, are signatories to the IOSCO MMOU for information sharing purposes. Additionally, many jurisdictions' regulators have also signed bilateral MoUs with foreign regulators for cooperation.

There is also an ESMA MMoU between EU national competent authorities and ESMA which entered into force on 29 May 2014. It has been signed by 31 authorities in the securities and markets area. The ESMA MMoU is designed to facilitate cooperation arrangements and the exchange of information between national competent authorities, and between national competent authorities under Union and national laws relating to the securities and markets area.

Commodity derivatives markets (KQ 6)

Commodity derivatives markets are observed in 21 out of 40 participating member jurisdictions, all of which have authority to collect information on a routine and regular basis regarding on-exchange commodity derivatives transactions. Examples of Australia and Hong Kong are placed below:

i. In Australia, ASIC has the authority to access information on a routine and nonroutine basis for ASX 24 (Australia's only active regulated commodity derivatives market) and Mercari (AML Licensee for wholesale OTC commodity derivatives). This information allows ASIC to identify any build up in concentration of positions (such as a build-up suggesting a price squeeze), and gives ASIC a clear picture of the composition of the market. ASIC's Market Surveillance team can make inquiries of market operators, participants, listed entities, clients and others under the Corporations Act.

ii. In Hong Kong, market participants are required to report their large open positions of commodity futures contracts traded on recognized futures exchanges and certain authorized ATS. The SFC is able to identify concentrations of positions and the overall composition of the commodity futures markets. The Client Identity Rule Policy (CIRP) also gives the SFC the power to obtain client identity information (includes information about the beneficiary of that transaction and details of the person originating the instruction) in relation to futures contracts that are listed or traded on a recognized futures market or other commodities derivatives, including OTC derivatives.

Organizational and technical capabilities (KQ 7)

All jurisdictions have specified that they have the competence and ability to supervise, monitor and scrutinize all the trading activities carried out on an exchange.

5.4.3. Gaps in Implementation

The following gaps in implementation have been identified in this Principle:

- i. In *Morocco*, while AMMC Morocco has the power to impose sanctions directly in some cases, in others it has to inform the Ministry of Finance or file a case with the state attorney.
- In South Africa, a gap has been observed with regard to organizational ability for monitoring cross-market trading. Since the South Africa Financial Sector Conduct Authority (FSCA) expanded the number of authorized exchanges beyond Johannesburg Stock Exchange, there is now potential for cross-market activity between the JSE and A2X (the only two exchanges with certain authorized users and same listed securities). The FSCA currently does not have a cross-market supervision function and have noted the need to develop one and are investigating options.

5.5. Principle 37: Regulation should aim to ensure the proper management of large exposures, default risk and market disruption.

IOSCO Methodology

Regulators should promote effective management of risk. With a view to fostering market resilience and stability, regulators should ensure that capital and other prudential requirements are met; are sufficient to address appropriate risk taking; and allow the absorption of some losses. An efficient and properly structured clearing and settlement process that is supervised and uses effective risk management tools is essential. The *Principle 37* methodology states that Market authorities should have mechanisms to monitor open positions, or credit exposures, on unsettled trades that are sufficiently large to pose a risk to the market or to a clearing firm (i.e., large exposures) (KQ 1). For commodity derivatives markets, reporting and publication of large and aggregate exposures is also important, and market authorities should have and use formal position management powers, including the power to set ex-ante position limits, particularly in the delivery month (KQs 3 and 8).

The *Principle 37* methodology also states that market authorities should make relevant information concerning market default procedures (and permitted corrective actions) are effective and transparent to market participants (KQs 4 and 5). Regarding related products (cash or derivatives markets), market authorities should consult with each other, as soon as practicable, with a view to minimizing the adverse effects of market disruptions (KQ 6). Further, there should be appropriate controls for short selling supplemented by a reporting regime and an effective compliance and enforcement regime (KQ 7).

Instability may result from events that occur in another jurisdiction or occur across several jurisdictions, so regulators' responses to market disruptions need to have cross-border considerations and should seek to facilitate stability both domestically and globally. Accordingly, Principle 37 requires market authorities to promote mechanisms that facilitate the sharing of information on large exposures through appropriate channels (KQ2).

5.5.1. Implementation Overview

Most of the jurisdictions reported having mechanisms for risk management in place including monitoring and reporting of large exposures and default procedures. For those jurisdictions that allow short selling on equity markets, most jurisdictions specify that they have appropriate compliance and enforcement systems and procedures in place. Gaps in some jurisdictions are observed regarding aggregate positions and in making reported information publicly available.

5.5.2. Trends

Monitoring of large exposures (KQ 1)

The monitoring of large exposures has been reported to be well implemented in almost all³⁸ jurisdictions as depicted in the following graph:



³⁸ One jurisdiction (Ireland) has specified as *Not applicable* as Ireland does not have participants that offer clearing or settlement services

All but three³⁹ member jurisdictions reported to have monitoring of large exposures (including trigger levels for identification of large exposures). Similarly, most⁴⁰ of the member jurisdictions have access to information (directly or upon request) on beneficial ownership and the reciprocal power to take action against a market participant for failure to provide information. The effectiveness of such a mechanism depends on the strength of the sanction, which are reported to range from increasing margin, to more severe liquidation of positions and/or revocation of trading privileges.

In Ireland, Irish securities are cleared and settled overseas, on systems within the EU Single Market by regulated service providers in other EU Member States. The 2014 FSAP considered that Ireland had effectively "outsourced" its clearing and settlement functions to foreign regulators but failed to monitor the activities required of such regulators by Principle 37. However, Ireland considers that such monitoring is not needed, pointing out that the European system of financial supervision allows member states in the EU to rely on the supervisory practices of other EU competent authorities. These practices are subject to monitoring and oversight measures at EU level by the European securities authorities and the European Systemic Risk Board.

In most jurisdictions, the *monitoring of large exposures* is part of the clearing and settlement process which is entrusted to a central counterparty (CCP).

An example of monitoring large exposures is detailed for New Zealand. In New Zealand, the New Zealand Clearing Ltd (CHO)'s standard process is to run an intra-day risk report 3 times a day. The risk report contains information in relation to Clearing Participants' positions and credit exposures. CHO would run an additional ad-hoc risk report when it either self identifies, or is notified internally (including from NZX Surveillance) of a likely volatile day or large trading events. CHO's reports are provided to NZX Surveillance for its consideration.

Information sharing on large exposures (KQ 2)

Similar to Principle 36, in order to ensure an effective framework, regulators should supplement monitoring with appropriate information sharing networks. All but two jurisdictions⁴¹ reported having appropriate channels in place for sharing information about large exposures. Again, cooperation arrangements and written agreements are the key mechanism employed by authorities. Some examples of domestic cooperation for sharing of information on large exposures:

i. The US SEC has entered into an MoU with the CFTC and the Federal Reserve relating to Credit Default Swaps (CDSs) which states that it reflects the agencies' intent to cooperate, coordinate and share information, including by establishing regulatory liaisons, in carrying out their respective responsibilities and exercising their respective authorities with regard to CCPs for CDSs.

³⁹ except Albania, Mexico and Romania

⁴⁰ except Albania and Romania

⁴¹ Albania and Romania

ii. The CFTC and futures exchanges have executed arrangements to share information that is prompted by, among other things, large exposures. The CFTC essentially has the same information that Designated contract markets (DCMs) have with respect to large exposure information. Wherever the exchanges manage position limits, they inform the CFTC of any exemptions. Frequent conversations occur between exchange and CFTC staff when liquidation or acquisitions of large exposures create a heightened concern. This has become more relevant with the increased open interest held by large passive long-only traders (index traders).

In addition, some jurisdictions have reported the use of *supervisory colleges* for cooperation and exchange of information on specific entities. Examples of Poland, Portugal and USA are as follows:

- i. In Poland the authorized CCP is the KDPW_CCP. For which the Polish KNF has established a college of supervisors under the EMIR. The college is composed of relevant central banks and other EU supervisors responsible for supervision foreign CCP-participants National Bank of Poland, KNF, EBC, Banco do Portugal, AMF and also ESMA as a non-voting member.
- ii. In Portugal, the CMVM also reported having various colleges for exchange of information with the regulators of the markets managed by Euronext, OMIP Derivatives Market, and the MIBEL Regulators.
- iii. In the US, the SEC reported participating in firm-specific supervisory colleges and crisis management groups. These fora permit the US and foreign regulators to discuss issues of mutual concern and provide another means for market authorities to consult with one another in order to minimize adverse effects associated with market disruptions.

Default Procedures (KQs 4 and 5)

All but three jurisdictions⁴² reported having *default procedures* in place, and that information is made available to market participants. Observed relevant practices in default procedures includes: legal safeguards for default procedures to take precedence over general/insolvency laws (Canada, Hong Kong, Italy, Singapore); the establishment of dedicated liquidation accounts (China); and powers of the regulator to intervene (Saudi Arabia). The examples can be seen at **Annexure 9**.

Consultation for minimizing adverse effects of market disruption (KQ 6)

Consultation and communication for minimizing effects of market disruption is most commonly addressed with MoUs. Globally, all members except Chile are signatories to the IOSCO MMoU and most other jurisdictions also report having other multi- or bilateral MoUs in place.

Domestically, several jurisdictions have indicated that they have consultation arrangements (most commonly written agreements but also committee arrangements) to facilitate the

⁴² Except Croatia, Romania and Mexico

sharing of information directed at minimizing market disruption. Examples of Israel, Portugal, Italy and India can be seen at **Annexure 10**.

Short Selling on equity markets (KQ 7)

Most of the jurisdictions reported allowing *short selling* on their equity markets and one⁴³ jurisdiction indicated they are currently analyzing the possibility of introducing short selling within the regulation, following the principles established by IOSCO (details in **Annexure 11**).



Short selling is permitted in all the participating APRC jurisdictions and most of the ERC and AMERC participating jurisdictions. Many jurisdictions⁴⁴ have informed that naked short selling is not permitted.

Examples of Canada (Ontario and Quebec) and EU can be seen below:

- i. In Canada (Ontario and Quebec), the Investment Industry Regulatory Organization of Canada (IIROC), the SRO, can designate a security as being subject to a pre-borrow requirement or as short sale ineligible where there is an unusual pattern of settlement failure in relation to that security or otherwise if such designation would be in the interest of obtaining a fair and orderly market. Also, in Canada all orders, subject to limited exemptions, that would result in a short sale must include a "short sale" designation that allows IIROC to identify short sale orders in real-time. IIROC has an alert that uses the short sale markers to look for declines in the price of a security associated with changes in the rate of short selling, based on a comparison to historical short selling patterns for the particular security.
- ii. The EU Short Selling Regulation introduces a harmonized and very detailed regime directly applicable throughout the EU for (i) the disclosure of material net short positions in shares to competent authorities and to the public (Articles 5 and 6); and (ii) restrictions on uncovered short sales in shares (Article 12). The Regulation sets out requirements for CCPs to ensure that procedures are in place, which ensure that where a natural or legal person who sells shares fails to deliver the shares for settlement by the date on which settlement is due, such person must make daily

⁴³ Argentina

⁴⁴ Australia, China, DIFC, Hong Kong, India, Japan, Republic of Korea, Pakistan, Saudi Arabia, South Africa, Thailand. Additionally, Brazil has informed that some mechanisms make naked short selling impracticable

payments for each day that the failure continues. The Regulations also grants extensive powers of intervention to national authorities and to ESMA to require additional disclosure and to undertake temporary additional restrictions on short selling of financial instruments in exceptional circumstances.

Most of the member jurisdictions that permit short-selling have informed that they have reporting regime⁴⁵ and regular monitoring/ surveillance of short selling activities.⁴⁶ Further, many⁴⁷ member jurisdictions have specified that they provide for appropriate exceptions for certain types of transactions (such as market making etc.) in case of short selling.

Commodity Derivatives markets (KQs 3 and 8)

Commodity derivatives markets are observed in 21 out of 40 participating member jurisdictions. Most of the jurisdictions⁴⁸ that have commodity derivatives market have specified that they (a) require reporting of large trader positions for the relevant on-exchange commodity derivatives contracts and (b) publish the aggregate exposures of different classes of large traders.

Further, most⁴⁹ of the jurisdictions having commodity derivatives markets have informed that the relevant market authority (mostly regulators) use powers for managing position limits and have the powers to employ additional measures to address market disruption.

5.5.3. Gaps in Implementation

The following gaps in implementation have been identified in this Principle:

- i. There are some jurisdictions that have identified gaps in relation to *monitoring of large exposures:*
 - a. Albania and Romania have reported that they do not have mechanisms for monitoring large exposures. Romania has informed that the Financial Supervisory Authority (ASF) is working on a development of a monitoring mechanism for checking and assessment purposes, in case of derivatives transactions, which will be finalized with new internal surveillance procedures and a new internal structure dedicated for it.
 - b. Mexico has specified that no systems for the identification and continuous monitoring of large exposures are in place.

⁴⁵ Except Angola, Kuwait, Mexico and South Africa.

⁴⁶ In New Zealand, short-selling activity is identified by the use of a 'short sale flag' that must be used when any short sale order is submitted. Short selling activities are monitored using Nasdaq SMARTS Trade Surveillance software as part of NZ trade surveillance activities

⁴⁷ Except Angola, Mexico, Morocco, Saudi Arabia, South Africa and Turkey.

⁴⁸ Except Turkey

⁴⁹ Except New Zealand and Pakistan. However, in New Zealand, under the NZX Derivatives Market Rules (Rules), the exchange NZX as front line regulator of the NZX Derivatives Market can take measures to manage position limits and address market disruption. The regulator FMA can issue NZX with a direction, if NZX were to fail to operate its markets in a fair, orderly and transparent manner.

- ii. Some jurisdictions (Romania and Mexico) have reported that they do not have *default procedures made available to the market participants*. Mexico has informed that Comisión Nacional Bancaria y de Valores (CNBV) has a general framework to rule the supervisory functions and also specific procedures for surveillance; however, those procedures are no available to the public.
- iii. Some jurisdictions (Angola, Kuwait, Mexico and South Africa) have reported that they do not have reporting regime for providing information on *short selling:*
 - a. Kuwait has informed that since the short sale action is only limited to market makers, there is no requirement to disclose market maker short selling.
 - b. In South Africa, the Financial Sector Conduct Authority (FSCA) is currently in the process of implementing reporting regime for short selling.
- While the Methodology states that the short selling framework should provide for appropriate exceptions for certain types of transactions for efficient market functioning and development (such as bona fide hedging, market making and arbitrage activities, some jurisdictions (Angola, Mexico, Morocco, Saudi Arabia, South Africa and Turkey) have provided that they do not have such exceptions. Saudi Arabia has reported that while there are no explicit exceptions, however, according to article 11 of the Short Selling Regulations, the exchange may, after obtaining the regulator's approval waive any requirement in the Short Selling Regulations either based on a request from the relevant person or on its own initiative.
- v. As noted above for Principle 36, *commodity derivatives markets* are observed in 21 participating jurisdictions. Of these, Turkey does not have arrangements for reporting of large trader positions and the publication of aggregate exposures of different classes of large traders.
- vi. With respect to the powers of setting ex-ante position limits for *exchange traded physical commodity derivatives*, a gap has been observed in one jurisdiction. In Pakistan, physical commodity derivatives market operates through pre-arranged trades between a buyer and seller that span a maximum of five days. Therefore, no such powers exist for setting ex-ante position limits. However, Securities & Exchange Commission of Pakistan (SECP) has specified that general powers are vested in the SECP as well as the exchange to control market abuses through the regulatory framework.
- vii. Further, it has been observed in some jurisdictions that while information regarding larger trader position from commodity derivatives markets is required to be reported to the market authority, there is no requirement to make this information public. This could prevent the timely detection of the build-up of risks and the management thereof. For example: In Australia, while the regulator receives information on large exposures with respect to exchange-traded physical commodity derivatives, that information is not disclosed to market participants.

In Australia's case, it has been reported that this is because the limited level of development of the commodity derivatives market does not warrant further disclosure of large trader positions or aggregate exposures of classes of large traders. ASX 24, Australia's only operational commodity derivatives market, currently generates Daily Beneficial Ownership Reports which ASIC has access to. Timely detection of a risk

build-up is possible under this framework. ASX 24 and ASIC can monitor open positions at all times and, most importantly, in the lead up to delivery periods where large positions may pose a risk to an orderly delivery process and fair settlement. Further, ASIC has reported that poor liquidity in the ASX Grain Futures market means that non-commercial investment is extremely rare. Publishing the aggregate exposures of different classes of large traders (e.g. commercial and non-commercial) is not required at this stage as the market is predominantly commercial and publication would not add any regulatory value.

6. MIFID II

In June 2014, the European Parliament and the Council of the EU adopted new rules revising the Markets in Financial Instruments Directive (MiFID) framework. These consist of a directive (MiFID II)⁵⁰ and a Markets in Financial Instruments Regulation (MiFIR)⁵¹ which became applicable as from 3 January 2018. The MiFID II is being implemented across the EU. With MiFID II, the EU envisages to further strengthen in particular the transparency and integrity of trading (addressed by IOSCO Principles 34 and 35). An overview of MiFID II framework in the context of IOSCO secondary and other market Principles is given at **Annexure 12.**

7. CONCLUSION AND RECOMMENDATIONS

The ISIM on secondary market Principles (P33 - 37) reviewed the self-assessments/FSAPs submitted by 40 member jurisdictions covering a mix of developed and emerging jurisdictions across all the regions. The review was mainly aimed at getting a global overview of the status of implementation of these IOSCO Principles. This exercise covered secondary market trading on authorized exchanges and the analysis was aligned with the Methodology.

Overall, the implementation of Principles 33-37 is found to be generally high across most of the jurisdictions, particularly in developed markets.

Recommendations

As detailed earlier in the report, the Review revealed several gaps in implementation of the secondary market Principles particularly for nascent and emerging market jurisdictions. These gaps clearly bring out the need for further reforms to be considered by the respective jurisdictions. Accordingly, the following recommendations are made for various jurisdictions, in alphabetical order according to the names of the countries:

i. In Albania and Bahamas, the regulators may consider developing adequate trading control mechanisms for dealing with market volatility. With the increasing use of technology in securities markets, particularly the speed and complexity of modern trading, the regulators require exchanges to improve their control structures to ensure that they are and remain adequate to cope with the nature, scale and speed of trading activity. The Albanian Financial Supervisory Authority (AFSA) and Securities Commission of the Bahamas (SCB) may consider introduction of appropriate trading control mechanism in the exchange regulated by them. Automated trading interruptions such as trading halts/ circuit breakers, price limits etc. may be

⁵⁰ <u>https://ec.europa.eu/info/law/markets-financial-instruments-mifid-ii-directive-2014-65-eu_en</u>

⁵¹ https://ec.europa.eu/info/law/markets-financial-instruments-mifir-regulation-eu-no-600-2014_en

considered. Further, depending upon the volume of trading, AFSA may also consider implementing appropriate pre-trade controls in order to control the entry of orders in the trading systems.

- ii. In **Albania**, the AFSA may consider developing mechanisms for providing member intermediaries with access to relevant pre-trade and post-trade information. The member intermediaries should have access to pre-trade and post-trade information (on a real-time basis) to enable them to implement appropriate monitoring and risk management controls. Suitable mechanisms may be developed to facilitate this.
- iii. In **Albania** and **Bahamas** the regulators may consider developing framework for reviewing trade matching algorithm of automated trading systems on periodic basis. This could form part of supervision / inspection of stock exchanges.
- iv. In Albania, Bahamas, Mexico and Romania, the regulators may consider developing mechanism for monitoring of large exposures. This may include setting trigger levels for identification of large exposures, access to information on beneficial ownership and appropriate authority of regulator to compel reduction of exposure. The "trigger" levels should be appropriate to the market. Further, the respective regulators (AFSA, Securities Commission of The Bahamas (SCB), CNBV and ASF) may also consider promoting mechanisms that facilitate sharing of the identified large exposures with concerned authorities. Where a market member does not make the relevant information available to the market authority, the authority should be able to take appropriate action — while taking into account the mechanisms already provided by the CCP, such as: imposing limitations on future trading by the member; requiring liquidation of positions; increasing margin requirements; or revoking trading privileges.
- v. In **Angola**, short selling is permitted on regulated securities and derivatives market. However, the regulatory regime do not provide for any reporting or surveillance of short selling activities. Further, there are no exceptions to the short-selling rules for specific types of transactions. The regulator Capital Market Commission (CMC) may consider reviewing the short selling regime on the following: (a) reporting regime of short-selling activities; (b) surveillance of such trading; and (c) evaluating the need for providing appropriate exceptions for certain types of transactions such as bona fide hedging, market making and arbitrage activities.
- vi. In **Argentina and Bahamas**, the regulators Comisión Nacional de Valores (CNV) and SCB may consider appropriate changes to law / regulatory framework for accessing the records and books of outsourced service providers. When functions are outsourced, such outsourcing does not negate the liability of the exchange for any and all functions that the exchange may outsource to a service provider. The exchange must retain the competence and ability to be able to ensure that it complies with all regulatory requirements, including access of records by the regulators (CNV and SCB).
- vii. In **Chile**, the SVS may consider formulating appropriate legal and regulatory frameworks for regulating derivatives markets.
- viii. In **Egypt**, the FRA may consider coordinating with their Ministry of Finance for making necessary changes in regulatory framework, enabling regulator to have the authority to withdraw authorization of exchanges.
- ix. In **Kuwait**, the regulator CMA has informed that there are ongoing reforms to address prudential requirements (e.g. exchange is currently working on implementing the full framework for margin lending; and the CMA Board has resolved to initiate the capital adequacy project). The CMA may implement the ongoing proposals to strengthen the prudential requirements. CMA Kuwait has informed that there are no automated pre-trade controls for orders entered on the exchange. The CMA may consider appropriate automated pre-trade controls, particularly in the context of increasing use of technology in securities markets and the speed and complexity of modern trading on exchanges.
- x. In **Mexico**, with respect to transparency of default procedures, it has been informed by CNBV that the procedures are not available to the public. CNBV may consider making the default procedures transparent and being made available to public. CNBV may also consider developing and implementing a reporting regime for short selling activities and evaluating the need for providing appropriate exceptions in short selling regime for certain types of transactions such as *bona fide* hedging, market making and arbitrage activities.
- xi. In **Morocco**, the Ministry of Finance has the authority for withdrawal of authorization as against exchanges. AMMC may consider coordinating with their respective Ministries for making necessary changes in regulatory framework, enabling regulator to have the authority to withdraw authorization of exchanges. It appears that AMMC has to inform Ministry of Finance for taking enforcement action in some cases. The AMMC Morocco may consider coordinating with Ministry of Finance in order to make changes in law to ensure regulatory independence for taking regulatory actions against entities for market manipulation.

The AMMC does not have provisions for a general suspension of all trading on the exchange. AMMC may consider implementing a market-wide trading halt for addressing excessive price volatility in the markets.

The AMMC has a short selling regime. However, there are no exceptions to the shortselling rules for specific types of transactions. AMMC may consider reviewing the short selling regime and evaluating the need for providing appropriate exceptions for certain types of transactions such as *bona fide* hedging, market making and arbitrage activities.

- xii. The SEC **Pakistan** may consider reviewing their powers in relation to setting ex-ante position limits for exchange traded physical commodity derivatives.
- xiii. In **Romania**, the ASF has informed that they do not have default procedures. However, the local legal regime contains provisions for using the defaulting firm's proprietary funds and assets to meet its obligations to market counterparties. The ASF may consider coordinating with relevant authorities for developing effective and legally secure arrangements for default handling. The default procedures may be made transparent and made available to the market participants. The ASF may consider appropriate amendments in regulatory frameworks for ensuring that assistance is made available to ASF by the exchanges in circumstances of potential trading disruption.

xiv. In **Saudi Arabia**, there is only one exchange established through law as the sole entity authorized to carry trading in securities in the Kingdom of Saudi Arabia. Since the law does not allow any other exchange to be established, there is no criteria for authorization. CMA, Saudi Arabia may consider engaging with the Government for making necessary legislative changes in order to allow authorization of exchanges based on defined criteria.

The enforcement actions that the CMA may take against the exchange are relatively limited and not explicit in the law. While CMA has the power to suspend the Exchange's activities for a period of not more than one day, in cases where the CMA or the Minister of Finance deems it necessary to suspend the Exchange's activity for more than one day, the approval of this decision must be issued by the Minister of Finance. The CMA does not have any power for withdrawal of authorization.

CMA may therefore consider coordinating with the Government for making necessary legislative changes in law allowing CMA to have adequate authority over exchanges, including power to withdraw authorization, based on well-defined conditions and processes.

CMA has informed there are no explicit exceptions in the short selling regime, though the exchange may, after obtaining CMA's approval waive any requirement in the Short Selling Regulations. The Saudi Stock Exchange may consider reviewing the short selling regime and evaluate the need for providing appropriate exceptions for certain types of transactions such as *bona fide* hedging, market making and arbitrage activities.

xv. In South Africa, since the FSCA expanded the number of authorized exchanges beyond JSE, there is now potential for cross-market activity between the JSE and A2X (the only two exchanges with certain authorized users and same listed securities). The FSCA currently does not have a cross-market supervision function and have noted the need to develop one and are investigating options. Where identical securities are traded on two exchanges, there may be increased potential for fraud or manipulation because of the difficulty of regulator in monitoring cross-market activity. Therefore, the FSCA may consider developing capacity for conducting crossmarket surveillance for monitoring trading activities across both the exchanges – JSE and A2X.

Since covered short selling is permitted in South Africa, FSCA may also consider reviewing the short selling regime, mainly:

- a. Implementing a reporting regime for short selling activities; and
- b. Evaluating the need for providing appropriate exceptions for certain types of transactions such as market making such as *bona fide* hedging, market making and arbitrage activities.
- In Thailand, the SEC has mentioned that the Stock Exchange of Thailand (SET) was originally established under the Securities Exchange of Thailand Act, B.E. 2517.
 Upon the enactment of the Securities and Exchange Act B.E. 2535, the statutory authorization of SET had been reconfirmed. However, the legislation neither stipulates conditions for the authorization of SET, nor does it provide any provisions for withdrawal of its authorization.

As SET is the only stock exchange in Thailand, the SEC considers that the withdrawal power may not be as crucial as the power to impose restrictions on the exchange or range of administration sanctions that the SEC has recently proposed to amend in the Securities and Exchange Act B.E. 2535.

While SEC Thailand has proposed amendment to enhance enforcement against the SET, the SEC may also consider coordinating with their Ministry of Finance for making necessary changes in regulatory framework in order to enable SEC to have the authority to withdraw authorization of exchanges.

- xvii. While at present, the trading volume of exchange-traded physical commodity derivatives are very limited in Turkey, the Capital Markets Board (CMB) **Turkey** may consider developing mechanisms for reporting of large trader positions and publication of aggregate exposures (within the bounds of maintaining trader confidence), with respect to exchange-traded physical commodity derivatives markets.
- xviii. In ADGM, UAE the FSRA may consider formulating appropriate regulatory framework to address risks from short selling activities. The FSRA has informed that due to the nascent stage of the ADGM, short-selling is not currently operating on any market within ADGM. Short selling, however, is (and will be) an acceptable market practice on markets within ADGM in the future. Reporting requirements will exist at that time.
 - xix. The Securities and Commodities Authority (SCA) **UAE** may consider reviewing their regulatory framework to ensure that assistance is made available to SCA by the exchanges in circumstances of potential trading disruption. SCA has mentioned that they are currently working with the Ministry of finance and the Central Bank. Further, they have regulations by SCA and rules by the markets to deal with trading disruptions.

In light of the gaps and corresponding recommendations mainly for the nascent and emerging markets, there can be a case for jurisdictions to consider approaching IOSCO for seeking (a) support letter from IOSCO for endorsing the need for legislative reforms; and /or (b) capacity building/ technical assistance for implementing regulatory reforms.

ANNEXURE 1– LIST OF PARTICIPATING JURISDICTIONS

- 1. Abu Dhabi Global Market (Financial Services Regulatory Authority)
- 2. Albania (Albanian Financial Supervisory Authority)
- 3. Angola (Comissão do Mercado de Capitais)
- 4. Argentina (Comisión Nacional de Valores)*
- 5. Australia (Australian Securities and Investments Commission)*
- 6. Bahamas (Securities Commission of The Bahamas)
- 7. Brazil (Comissão de Valores Mobiliários)*
- 8. Canada Ontario (Ontario Securities Commission)*
- 9. Canada Quebec (Autorité des marchés financiers)*
- 10. Chile (Superintendencia de Valores y Seguros)
- 11. China (China Securities Regulatory Commission)*
- 12. Croatia (Croatian Financial Services Supervisory Agency)
- 13. Dubai International Financial Centre (Dubai Financial Services Authority)
- 14. Egypt (Financial Regulatory Authority)*
- 15. Greece (Hellenic Capital Market Commission)
- 16. Hong Kong (Securities and Futures Commission)*
- 17. Hungary (Magyar Nemzeti Bank Central Bank of Hungary)
- 18. India (Securities and Exchange Board of India)*
- 19. Ireland (Central Bank of Ireland)*
- 20. Israel (Israel Securities Authority)
- 21. Italy (Commissione Nazionale per le Societá e la Borsa)*
- 22. Japan (Financial Services Agency)*
- 23. Kuwait (Capital Markets Authority)
- 24. Mauritius (Financial Services Commission)
- 25. Mexico (Comisión Nacional Bancaria y de Valores)*
- 26. Morocco (Autorité Marocaine du Marché des Capitaux)
- 27. New Zealand (Financial Markets Authority)
- 28. Pakistan (Securities and Exchange Commission)*
- 29. Poland (Polish Financial Supervision Authority)
- 30. Portugal (Comissão do Mercado de Valores Mobiliários)*
- 31. Republic of Korea (Financial Services Commission/Financial Supervisory Service)*
- 32. Romania (Financial Supervisory Authority)
- 33. Saudi Arabia (Capital Market Authority) *
- 34. Singapore (Monetary Authority of Singapore)*
- 35. South Africa (Financial Sector Conduct Authority#)*
- 36. Thailand (Securities and Exchange Commission)
- 37. Turkey (Capital Markets Board)*
- 38. United Arab Emirates (Securities and Commodities Authority)*
- 39. U. S. Commodity Futures Trading Commission*
- 40. U. S. Securities and Exchange Commission*
- * IOSCO Board members

The Financial Services Board has been replaced by the Financial Sector Conduct Authority on 01 April 2018.

ANNEXURE 2: DETAILS OF MARKETS AND AUTHORIZED EXCHANGES

Sr. No.	Jurisdiction	Regulator	Authorized Exchange(s)	Asset Classes
	AMERC Reg	gion		
1	ADGM	Financial Services Regulatory Authority (FSRA)	Applications are in progress (for Recognised Investment Exchanges (inside ADGM), and for Remote Investment Exchange (outside ADGM). 1(One) Exchange is Recognised remotely.	Security derivatives, commodity derivatives, currency derivatives.
2	Angola	Capital Markets Commission	Angolan Stock Exchange (BODIVA)	Public Debts (Government Bills, Notes and Bonds)
3	DFSA	Dubai Financial Services Authority (DFSA)	 Nasdaq Dubai Ltd (ND) Dubai Mercantile Exchange Ltd (DME) 	<u>ND:</u> Equities, equity derivatives, units (funds) debt instruments (bonds and Islamic Sukuk) are listed on ND but there is no trading in the debt instruments. <u>DME:</u> Commodity derivative contract (physical settlement through oil delivery), and financial commodity derivatives contracts (oil based but with no physical delivery)
4	Egypt	Financial Regulatory Authority (FRA)	The Egyptian Exchange (EGX)	Equities, Bonds, Mutual funds, ETFs etc. 1-"X-Stream":trading system FOR multiple product classes including equities, debt, commodities, ETFs, futures and options in both an exchange traded and cash/OTC/derivatives environment 2-EGX also offers an in-house developed OPR program that deals with the IPO's and private placements before execution in the market
5	Kuwait	СМА	Kuwait Stock Exchange	Equity
6	Mauritius	Financial Services Commission, Mauritius	Stock Exchange of Mauritius Ltd	Equities (Ordinary & Preference Shares), corporate debentures & bonds, government securities, Specialist Debt Securities, Exchange Traded Funds, Depositary Receipts and Structured Products
7	Morocco	AMMC	Casablanca Stock Exchange – Millenium	Equity, Private Debt

Sr. No.	Jurisdiction	Regulator	Authorized Exchange(s)	Asset Classes
8	Saudi Arabia	The Capital Market Authority ("The Authority")	Saudi Stock Exchange.	Equity, debt instruments, ETFs, REITs and closed ended investment traded funds. ⁵²
9	South Africa	Financial Services Board	 JSE Limited, A2X, 4 Africa Exchange Ltd (4AX), ZAR X (Pty) Ltd, Equities Express Securities Exchange (Pty) Ltd (EESE) 	JSE Limited : (Entire class or classes of anissuers ordinary shares, All classesof preferential shares, Debentures,Bonds, Notes, Commercial paper,Fixed floating or floating interestinstruments) $\underline{A2X}$:(equity) $\underline{4}$ \underline{AX} : (Ordinary shares, Preferentialshares, Debentures, Bonds, Notes,Commercial paper, Fixed floatingor floating interest instruments) \underline{ZAR} \underline{X} : (Ordinary Shares,Restricted shares, InvestmentCompany/SPVShares,Cooperatives/agriculturalcompany restricted shares andpreferenceshares)EESE (Restricted equity shares)
10	UAE	SCA	ADX, DFM	Equities, equity derivatives, units (funds & ETF) debt instruments (bonds and Islamic Sukuk), Government Debt, Commodity derivative contract, financial commodity derivatives contracts as well as equity derivatives (recently permitted yet to trade) – Warrants, Rights, DRs, Second market
	APRC Region	n		
11	Australia	Australian Securities and Investment Commission (ASIC)	 ASX Limited Australian Securities Exchange Limited (ASX 24) BGC Partners (Australia) Pty Limited Bloomberg Tradebook Australia Pty Ltd. Chi-X Australia Pty Ltd IMB Ltd IR Plus Securities Exchange Limited⁵³ Financial and Energy Exchange (FEX Global) 	Equity equity derivatives, debt (Government and Corporate Bonds), debt derivatives, Commodity derivatives, • Energy (electricity, gas) • Agricultural (grain, wool, beef, lamb); foreign exchange contracts; foreign exchange derivatives (securities & managed investments)

⁵² The Saudi Stock Exchange (Tadawul) announced on September 04, 2018 that it will introduce exchange-traded derivatives in the first half of 2019. Further, CMA Saudi Arabia has informed that several measures have been announced to be implemented since the beginning of 2018 that will pave the way for Exchange Traded Products (ETP) and derivatives.

⁵³ This exchange had its licence cancelled on 27 February 2018.

Sr. No.	Jurisdiction	Regulator	Authorized Exchange(s)	Asset Classes
			 9. Imperium Markets Pty Limited 10. Mercari Pty Limited 11. National Stock Exchange of Australia Limited 12. Sydney Stock Exchange Limited 13. Thomson Reuters Transaction Services Pte Limited 14. Vieldbroker Pty Limited 	
12	China	CSRC	 Yieldbroker Pty Limited Shanghai Stock Exchange, Shenzhen Stock Exchange, Shanghai Futures Exchange, Zhengzhou Commodity 	Equity, Mutual funds, Bonds, Commodities Futures, Stock Index Futures, Treasury Bond Futures, Stock Options
13	Hong Kong	SFC	 The Stock Exchange of Hong Kong Limited ("SEHK") Hong Kong Futures Exchange Limited ("HKFE") 	Securities, Listed Derivatives, OTC Derivatives
14	India	SEBI	 National Stock Exchanges National Stock Exchange National Stock Exchange BSE Ltd. Metropolitan Stock Exchange of India Ltd. Commodity Derivatives: Multi Commodity Exchange (MCX), National Commodity and Derivative Exchange limited (NCDEX), National Multi Commodity Exchange of India Limited (NMCE) Hapur Commodity Exchange Limited (HCEL) Rajkot Commodity Exchange (RCX) Indian Pepper and Spices Trade Association (IPSTA) Ace Derivatives and Commodity Exchange Limited 	Equity, Equity derivatives, Currency derivatives, Interest Rate Futures, Corporate bonds, Mutual Funds, Sovereign Gold Bond scheme. Commodity Derivatives

Sr. No.	Jurisdiction	Regulator	Authorized Exchange(s)	Asset Classes
15	Japan	Financial Instruments Exchange are regulated by Financial Services Agency. Commodity Exchange are regulated by Ministry of Agriculture, Forestry and Fisheries, Ministry of Economy, Trade and Industry.	FinancialInstrumentsExchange1.Tokyo Stock Exchange, Inc.2.Osaka Exchange, Inc.3.Nagoya Stock Exchange, Inc.4.Fukuoka Stock Exchange5.Sapporo Securities Exchange6.Tokyo Financial Exchange7.Tokyo Commodity Exchange Inc.,8.Osaka Dojima Commodity Exchange)	Financial Instruments Exchange (Equity, Debt, Derivatives, ETF, FX) Commodity Exchange (Commodity Derivatives)
16	Republic of Korea	FSS(Financial Supervisory Service) and FSC (Financial Services Commission)	KRX (Korea Exchange)	Equity shares, bonds, ETFs, ETNs, ELWs, commodities, futures and options
17	New Zealand	FMA (Financial Markets Authority) is the statutory regulator, and NZX Limited an SRO, is the primary regulator.	NZX Limited (New Zealand Stock Exchange)	Equity, Debt, Managed Investment Products, Dairy Derivatives, Equity Derivatives.
18	Pakistan	SECP (Securities and Exchange Commission of Pakistan)	Pakistan Stock Exchange Pakistan Mercantile Exchange	Equity, Debt, Derivatives, Commodity Derivatives
19	Singapore	MAS (Monetary Authority of Singapore)	 SGX-ST SGX-DT ICE Futures Singapore Asia Pacific Exchange 	Derivatives contracts and securities
20	Thailand	SEC Thailand regulates Equity, equity derivatives and commodity derivatives. SEC and Bank of Thailand	SET, TFEX	SET and mai (equity), TFEX (equity derivatives, commodity derivatives and currency derivatives)

Sr. No.	Jurisdiction	Regulator	Authorized Exchange(s)	Asset Classes
		jointly regulate Currency Derivatives		
ERC	C Region			
21	Albania	Albanian Financial Supervisory Authority (AFSA)	Quick Trade	Government securities
22	Croatia	Croatian Financial Services Supervisory Agency (HANFA)	Zagreb Stock Exchange	Equity, Debt
23	Greece	Hellenic Capital Market Commission (HCMC)	Athens Exchange (ATHEX)	Securities Market (Equity, Debt, ETFs, Warrants), Derivatives Market (equity derivatives)
24	Hungary	The Central Bank of Hungary	Budapest Stock Exchange (BSE)	Equities, derivative products, commodities
25	Ireland	Central Bank of Ireland	Irish Stock Exchange	Equity, Debt
26	Israel	Israel Securities Authority	Tel Aviv Stock Exchange ("TASE')	Stocks, government and corporate bonds, convertible securities, treasury bills, index derivatives, FX derivatives, equity options, ETN ⁵⁴ s and Mutual Funds
27	Italy	CONSOB	Borsa Italiana S.p.A. :	Stocks, ETFs, ETCs & ETNs, Funds, Derivatives, CW & Certificates, Bonds
28	Poland	Polish Financial Supervision Authority (KNF)	GPW	Shares and Derivatives
29	Portugal	CMVM – Portuguese Securities Market Commission	Euronext Lisbon, OMIP	Euronext Lisbon: Equity, ETF, debt, securitized derivatives, Futures and Options Market individual equity derivatives and index derivatives OMIP Derivatives Market: commodity derivatives

⁵⁴ As part of a comprehensive and fundamental reform, until the end of 2018, all ETNs will become mutual funds of a new type which will be called ETFs and which will be subject to the Joint Investment Trust Law 5754–1994

Sr. No.	Jurisdiction	Regulator	Authorized Exchange(s)	Asset Classes
30	Romania	Romanian Financial Supervisory Authority (ASF)	Bucharest Stock Exchange (BVB)	Equities, Bonds (municipal, corporate, government), Unit funds, Rights (pre- emptive, allotment), ETF, Structured products (certificates, warrants)
31	Turkey	Capital Markets Board of Turkey (CMB)	Borsa İstanbul (BIST)	Equity, ETF, Warrant, Real Estate Certificates, Derivatives (Equity, Commodity, Index, Currency, Overnight Repo Rate), Debt Securities (Government-Corporate), Repo, Sukuk, Precious Metals and Stones
IAI	C Region			
32	Argentina	Comisión Nacional de Valores (CNV)	 ROFEX S.A., Mercado a Término de Buenos Aires S.A., Mercado Abierto Electrónico S.A. Mercado Argentino de Valores S.A., Bolsas y Mercados Argentinos S.A. (ByMA) 	Equity, Debt, Derivatives, Commodity Derivatives
33	Bahamas	Securities Commission of The Bahamas	Bahamas International Securities Exchange ("BISX")	Equity, Debt, Mutual funds
34	Brazil	Securities and Exchange Commission of Brazil (CVM)	1. B3 S.A. Brasil Bolsa, Balcão (B3)	Equities, equities derivatives, commodities derivatives, currency derivatives, index derivatives, debt.
35	Canada (Ontario and Quebec)	Please refer to the List of Exchanges, Lead Regulators and Exempting Regulators included in the memorandum of understanding (MOU) respecting the oversight of exchanges	 Alpha Exchange Aequitas NEO Exchange Bourse de Montréal (MX) ICE NGX Canada Inc. Canadian Securities Exchange Nasdaq CXC Limited Toronto Stock Exchange TSX Venture Exchange 	 <u>Equity</u>: Alpha Exchange (Alpha), Aequitas NEO Exchange , Canadian Securities Exchange Nasdaq CXC Limited Toronto Stock Exchange TSX Venture Exchange (TSXV)), <u>Financial Derivatives</u> Bourse de Montréal (MX) <u>Commodity Derivatives</u>: Independent Electricity System Operator

Sr.	Jurisdiction	Regulator	Authorized Exchange(s)	Asset Classes
No. 36	CFTC USA	CFTC Superintenden ce of Securities and Insurance, hereinafter SVS.	 Cantor Futures Exchange, L.P. CBOE Futures Exchange, LLC CME Group Eris Exchange, LLC ICE Futures U.S., Inc. Minneapolis Grain Exchange, Inc. NASDAQ Futures, Inc. Nodal Exchange, LLC ICE Sutures Value State Nodal Exchange, LLC 1. Santiago Stock Exchange 3. Chilean Electronic Stock Exchange	 Cantor Futures Exchange, L.P. (Binary options and spreads, weather contracts) CBOE Futures Exchange, LLC (futures based on equity indices and volatility) CME Group (very broad range, including: commodity, energy, FX, metals, equity, and interest rate contracts) Eris Exchange, LLC (interest rate swap futures) ICE Futures U.S., Inc. (agricultural futures, energy futures, interest rate futures, single stock and equity index futures, metals futures, credit default swaps, FX futures, emissions futures) Minneapolis Grain Exchange, Inc. (commodity derivatives) NASDAQ Futures, Inc. (energy and treasury futures) Nodal Exchange, LLC (energy futures) The three licensed exchanges trade shares. The Santiago Stock Exchange and the Chilean Electronic Exchange also trade shares of funds, monetary instruments (dollar and in the case of the Santiago Stock Exchange, gold and silver), fixed-income instruments, financial intermediation instruments and foreign securities. Finally, the Santiago Stock Exchange is authorized to trade futures and options, although the latter have not been traded during last year.

Sr. No.	Jurisdiction	Regulator	Authorized Exchange(s)	Asset Classes
38	Mexico	 Comisión Nacional Bancaria y de Valores. (CNBV) Secretaría de Hacienda y Crédito Público (Ministry of Finance, SHCP) 	 Mexican Stock Exchange (BMV) Institutional Stock Exchange (BIVA). (BIVA is in process of starting operations) Mexican Derivatives Market, (MexDer). 	 Shares, certificates, debt securities and other foreign securities which are traded in recognized foreign exchange markets. Derivatives are listed for the following underlying assets: Futures contracts: currencies (USD, Euro), shares, stock indexes (S&P, IPC), debt securities (91-day CETE, 28-day TIIE, 10 and 2 year TIIE swaps, development Bonds of the Federal Government maturing in 3, 10, 20 and 30 years. Options contracts: equity, currencies (USD), stock indexes (IPC) and futures (Futures on S&P). Swaps contracts: on Fixed Nominal
39	US SEC	SEC	 <u>National Securities Exchanges</u> BOX Options Exchange BOX Options Exchange LLC (BOX) Cboe BYX Exchange, Inc. (CboeBYX) Cboe BZX Exchange, Inc. (CboeBZX), Cboe C2 Exchange, Inc. (C2), Cboe EDGA Exchange, Inc. (C2), Cboe EDGA Exchange, Inc. (CboeEDGA), Cboe EDGX Exchange, Inc. (CboeEDGX), Cboe EDGX Exchange, Inc. (CboeEDGX), Cboe EDGX Exchange, Inc. (CBOE), Chicago Stock Exchange, Inc. (CHX), Investors Exchange LLC (IEX), Miami International Securities Exchange LLC (MIAX), MIAX PEARL, LLC (PEARL), Nasdaq GEMX, LLC (GEMX), Nasdaq GEMX, LLC (GEMX), Nasdaq MRX, LLC (MRX), Nasdaq PHLX LLC (Phlx), The Nasdaq Stock Market	Interest Rates and Nominal Interest Rates. Equity, equity derivatives, debt

Sr.	Jurisdiction	Regulator	Authorized Exchange(s)	Asset Classes
No.				
			18. New York Stock Exchange	
			LLC (NYSE),	
			19. NYSE Arca, Inc.	
			(NYSEArca),	
			20. NYSE MKT LLC	
			(NYSEAMER),	
			21. NYSE National, Inc.	
			(NYSENAT)	
			Notice Registered Securities	
			Future Product	
			Exchanges	
			1. CBOE Futures Exchange	
			(CFE),	
			2. Chicago Board of Trade	
			(CBOT),	
			3. Chicago Mercantile	
			Exchange (CME),	
			4. OneChicago (OC)	

ANNEXURE 3 – CROSS BORDER RECOGNITION

Some examples of cross-border recognition:

- 1. In Australia, there are "alternative" criteria that must be satisfied if exchanges that have their principal place of business located in a foreign country. The relevant alternative criteria include: the foreign country must be subject to requirements and supervision that are sufficiently equivalent in relation to the degree of investor protection and market integrity as the Australian regime; the applicant undertakes to cooperate with ASIC by sharing information and in other ways; no unacceptable control situation would result if the Australian Market Licence (AML) was granted; and no disqualified individual appears to be involved in the applicant.
- 2. In Canada (Ontario and Quebec), exemption from recognition/authorization of an exchange may apply to foreign exchanges, if the authorities are satisfied that the foreign regulatory framework is equivalent and appropriate cooperation arrangements are in place.
- 3. ADGM and Dubai International Financial Centre (DIFC) are International Financial Centres established within UAE. There are two types of recognition of exchanges in both the jurisdictions (ADGM and DIFC):
 - i. In ADGM, the FSRA grants two types of recognition order for exchanges (a) those established in ADGM (recognized investment exchange); and (b) those established in another jurisdiction (remote investment exchange).
 - ii. In DIFC, the Dubai Financial Services Authority (DFSA) requires that any applicant who intends to operate an exchange must apply to the DFSA for a license. Persons operating an exchange from a place of business outside the DIFC are exempt from licensing and are admitted as Recognised Bodies. The recognition module sets out the recognition criteria for inclusion in the Recognised Bodies list, which is premised on the equivalence of regulation as provided under the DFSA regime.

ANNEXURE 4 - INTRODUCTION AND WITHDRAWAL OF CIRCUIT BREAKER IN CHINA

The Chinese stock markets witnessed excessive market volatility during 2015 and early 2016, as can be seen from the below graph:



Considering the large volatility, the circuit breaker mechanism was introduced by CSRC with effect from 01 January 2016. The circuit breaker mechanism introduced by CSRC kicks in when the CSI 300 - an index that comprises the biggest stocks on the Shanghai and Shenzhen Composites - declines 5 percent, triggering a 15-minute trading halt. A further drop to 7 percent on the CSI 300 causes trading to be suspended for the day on all mainland indices.

The circuit breaker was activated on two days in the first week of January:

- 04 January 2016: Shenzhen & Shanghai stock markets declined in the morning session. At 13:13pm, the continuous decline in CSI 300 Index triggered the 5% threshold. The trading was halted for 15 minutes and was resumed at 13:28pm. The decline in CSI 300 Index price triggered the 7% threshold at 13:34pm, thus the market was closed for the whole day.
- 07 January 2016: The CSI 300 index plummeted by 5%, causing the initial 15-minute halt at 09:42 am. Shares continued to fall as trading reopened and the CSI 300 index dropped by more than 7% and the trading day was brought to an end at 9.59am local time. China suffered its shortest trading day in history at just 29 minutes.

CSRC suspended the circuit breakers with the following reasons: After weighing advantages and disadvantages, currently the negative effect is bigger than the positive one. Therefore, in order to maintain market stability, CSRC has decided to suspend the circuit breaker mechanism.



There was sharp fall in stock prices in the initial period of 2016, as can be seen below:

During January and February 2016, there were total 5 instances on which the decline of CSI 300 was more than 5%:

- i. 04 and 07 January 2016: The circuit breaker was activated on both the days (details provided above).
- ii. 11 January, 26 January and 25 February 2016: There was no circuit breaker in place on these three days and the fall in Index was approx. 5.03%, 6.02% and 6.14% respectively.

ANNEXURE 5 – CO-LOCATION

The Key Issues under Principle 33 mentions that the fairness of latency differences resulting from different technical connection options and, in particular, from co-locating high speed algorithmic trading systems adjacent to exchange servers raises significant technical and market integrity issues.

Some jurisdictions have provided information about the co-location facility and the recent developments. For example:

- 1. In the USA, in the securities markets, the terms of any service that impacts access to the exchange and its facilities, such as colocation services, including the fees charged for such services, are required to be filed as proposed rule changes. When reviewing such rule changes, the SEC takes into account Section 6(b)(4) of the Exchange Act which requires that the rules of the exchange provide for the equitable allocation of reasonable dues, fees, and other charges among its members and issuers and other persons using its facilities; Section 6(b)(5) of the Exchange Act which requires, among other things, that the rules of the exchange are not designed to permit unfair discrimination between customers, issuers, brokers or dealers; and Section 6(b)(8) of the Exchange Act which requires that the rules of the exchange not impose any burden on competition not necessary or appropriate in furtherance of the Exchange Act.
- 2. In **Hong Kong**, the Stock Exchange of Hong Kong started its new co-location services for the cash market in December 2012 and for derivatives in June 2013. Among those participants who have trading systems at the co-location center, the system access time and latency are equal.
- 3. For **EU region**, under MIFID 2, the principles of fairness, transparency and nondiscrimination must be applied also to co-location services and to the fees charged and rebates given by trading venues.
- 4. In **Canada** (**Ontario and Quebec**), the rules of the marketplace must describe *inter alia* all the fees, including any listing, trading, date, co-location and routing fees charged directly or indirectly. These fees and their changes must be filed and are reviewed by the regulators. A marketplace must not permit unreasonable discrimination among clients and marketplace participants and this requirement applies, amongst others, to co-location services. In Quebec, the Montreal Exchange does not disclose differences in order execution response time. However, details concerning colocation or points of presence ("POP") are disclosed, notably: physical location of the trading engine (colocation); security of the facility (colocation); power supplies available (colocation), bandwidth package offered (colocation and POP); anticipated message loss probability associated with the client bandwidth package.
- 5. In **Australia**, ASIC has clarified through guidance that all market participants that seek access to a market operator's systems or services (including co-location services) should have access on fair, non-discriminatory terms.

- 6. In **Singapore**, access for participation in an approved exchange or recognized market operator's facilities must be based on fair and objective criteria. In practice, all similarly situated participants (including members and customers) of SGX-ST, SGX-DT and ICE (i.e. participants under the same class of participation, or participants who have subscribed to or paid for the same type of services, for example, co-location of participants' systems with that of the exchange's trading system) will have equal opportunity to connect and maintain the connection to the relevant exchange's trading system.
- 7. In India, SEBI has recently, in April 2018, introduced further reforms relating to colocation framework, such as: (a) introduction of 'managed co-location service' for facilitating small and medium sized trading members to avail colocation facility; (b) publishing of latencies by stock exchanges; and (c) Free of Charge Tick-by-Tick Data feed to be provided by stock exchanges to all the trading members.

ANNEXURE 6 – SURVEILLANCE SYSTEMS

Surveillance across all equity markets through SROs

In **Canada** (**Ontario and Quebec**), as the regulation services provider for both equity exchanges, Investment Industry Regulatory Organization of Canada (IIROC), a Canadian SRO, performs day-to-day monitoring of trading on all equity exchanges. This monitoring is done both in real-time and using post-trade reports, and is designed to ensure compliance with the regulatory requirements. Real-time monitoring of trading on all equity marketplaces is conducted by IIROC through the Surveillance Technology Enhancement Platform system (STEP). STEP provides a consolidated view of orders and trades across all equity marketplaces. This helps in the detection of unusual activity and with identifying possible violations of securities laws. In the future, the surveillance system will enhance analytical capabilities by supporting better data mining, visualization and reporting and will employ new tools, including machine learning and artificial intelligence. The new system is expected to be fully implemented by the end of 2018.

In **Japan**, Japan Exchange Regulation, a Japanese SRO conducts day-to-day market surveillance based on all trading data. The Securities and Exchange Surveillance Commission (SESC) conducts market surveillance using trading data obtaining from SRO/ market participants, and also refer the information from the public.

In the USA, subject to SEC oversight, the securities industry's SROs have the primary responsibility for the daily surveillance of trading activities and regulatory compliance. The SROs are responsible for establishing, reviewing, and enforcing standards of conduct for their members, and for fair and orderly operation of trading or other facilities they provide. The SEC has the authority to inspect both the SROs and market participants to determine whether the various anti-fraud, anti-manipulation, and reporting regulations are being complied with. The SEC can also obtain surveillance and/or trading data from the SROs. On 18 July 2012, the SEC adopted Rule 613, which among other things, required the SROs to jointly submit a plan - called an NMS plan - to create, implement and maintain CAT (CAT NMS Plan). On 15 November 2016, the SEC approved the CAT NMS Plan. The CAT NMS Plan requires that the plan processor chosen by the SROs build a central repository that will receive, consolidate, and retain the trade and order data reported to CAT. The CAT NMS Plan applies to NMS securities, including options, as well as to over-the-counter equity securities. At the various stages in the lifecycle of an order—e.g., origination, routing, modification/ cancellation, and execution-the SROs and broker-dealers must report certain information about the order to the central repository. The CAT NMS Plan provides that the SROs and the SEC will have access to the data contained in the central repository for regulatory and oversight purposes.

Surveillance system by regulators

In **Argentina**, the CNV has a Market Monitoring System to track transactions in real time that are traded in the authorized markets. The monitoring system is the "Stock Watch II online". It is a system elaborated by the CNV's IT Division, which is nourished in real time from the operations that all markets provide. The system has alarms or parameterized alerts on prices, volume, and concentration of operations, which allows the CNV to follow the operations in real time and facilitate the detection of unusual movements that could alter the transparency in the markets.

In **Hong Kong**, the Securities and Futures Commission (SFC) has real time access to the pretrade information on trades conducted on The Stock Exchange of Hong Kong Limited (SEHK) and Hong Kong Futures Exchange (HKFE). The SFC also receives post trade data from SEHK and HKFE on a daily basis. The SFC conducts the daily monitoring which entails: (a) Macro monitoring (local and overseas markets) and analysis of the latest market developments, including performance, volatility, trading activities in both the cash and derivatives markets; and (b) Risk monitoring reports of various market segments to detect irregularities such as concentration and building up of positions, and identify trends and significant or sudden changes, which may have systemic impact on the stock and derivatives markets.

In **India**, the recognized stock exchanges have in place automated systems of market surveillance which are complemented by SEBI's own system which allows for surveillance across exchanges and market segments. SEBI's Integrated Market Surveillance System (IMSS) and Data warehouse & Business Intelligence System (DWBIS) integrates the data from across the recognized stock exchanges and depositories. All data from the recognized stock exchanges and depositories are delivered overnight and fed into IMSS and DWBIS. DWBIS, an in-house system developed by SEBI for data mining and analytics. In addition to trading data, DWBIS stores a wide array of non-trading information, including corporate announcements and information related to individual traders and entities. DWBIS can automatically generate consolidated analysis of trading data for a wide range of market misconduct, including front running, wash sales, marking the close and possible pump and dump schemes.

In Israel, the ISA operates a market surveillance and data analysis system using "Business Intelligence" (BI) technology. This system is intended to expose unusual market activity, such as market abuse and use of inside information. The system is designed to integrate information from multiple sources in order to provide the ISA staff with a clear and full picture of events. The data available on the system is collected from a wide range of sources: TASE (real time market data), the Ministry of Finance, TASE members, other ISA systems, as well as spreadsheets and manually keyed information. The type of information available on the BI includes: trade orders, executed transactions, price quotes, index data, corporate actions, data on issuers and mutual funds and data about the trading activity and holdings of controlling shareholders and interested parties. The BI system uses pre-designed formulas and algorithms to monitor activity on TASE in order to locate irregularities in price movements, turnover and other parameters. It cross-references trade data with the parties carrying out the trading (e.g., if the investor is a potential insider such as a senior officer or a principal shareholder). Mutual funds and portfolio management firms are required to file various reports on MAGNA. These include fund prospectuses and periodic reports, ongoing details of fund assets, investment policy disclosures and reports of fund activity against benchmark indicators. Since mutual funds and portfolio management firms are supervised by the ISA, their encrypted injective accounts numbers are known to the ISA which allow the ISA to monitor their trading activity. This may then be cross-referenced to the regulatory information filed by each entity. The system spots activity that indicates that a violation of regulations has occurred, (e.g., if a fund purchases shares even though its stated investment policy is "strictly bonds"). The system then sends alerts to the appropriate ISA supervisor. The encrypted injective accounts numbers of all the pension and provident funds and insurance companies are also known to the ISA. In the event that one of these entities performs an unusual market activity (such as market abuse) the ISA can immediately identify the perpetrator, without the need to inquire for identification details.

In **Portugal**, CMVM supervises the regulated market in a real time basis, accessing to the trading data through the Euronext system M2S. Data received in real time is inserted in the CMVM monitoring system for market abuse (SIVAM), which issues alarm signals whenever certain parameters are met.

ANNEXURE 7 – CRIMINAL SANCTIONS

Jurisdiction	Details of criminal enforcement powers
AMERC Re	
ADGM	Federal Law No. (8) of 2004 specifically exempts persons operating within a financial free zone within the UAE (the ADGM and the DIFC) from the application of all Federal civil and commercial laws, while leaving in force the criminal and criminal procedure laws of the UAE. Crimes committed within either financial free zone in the UAE will be prosecuted in the same manner as any other crime within the State, with the ultimate decision to commence criminal proceedings being taken by a public prosecutor appointed by the Federal Minister of Justice. Crimes which come to the attention of any public servant (including the FSRA staff) must be brought to the attention of either the police or the office of the public prosecutor, in accordance with Federal Law No (35) of 1992, the Federal Penal Procedures Law. In the same manner as other financial services regulators who work closely with police and prosecutors in their respective jurisdictions, the ultimate decision to commit State resources to prosecute a crime under the UAE Penal Code which has occurred in a financial free zone rests with the public prosecutor.
	the investigation and prosecution of financial crime, the FSRA executed a MOU with the Abu Dhabi Police on 19 March 2018.
Angola	The regulator can initiate criminal actions against those who have violated market rules and/or caused damage to investors.
DIFC	Does not have a separate criminal legal regime from the UAE. Persons operating in or from the DIFC are exempt from the application of all UAE civil and commercial laws, UAE criminal law still applies. DFSA is obliged pursuant to the UAE Penal Code to refer criminal matters to the relevant criminal authority. The DFSA is also empowered to disclose confidential information and refer matters to criminal and other authorities. The DFSA has a bilateral MoU in place with the Dubai Police signed on 30 November 2005. The MoU seeks to establish a framework for mutual assistance and facilitate the exchange of information, and also sets out the process by which requests for assistance can be made by either party.
Egypt	Procedures of investigation or filing criminal lawsuits as regards the violations stipulated by the laws shall only be conducted pursuant to a written request of FRA's Chairman. The FRA's Chairman may amicably settle the said violations at any stage of prosecution in consideration of a sum not less than double the minimum fine to be paid to the Authority. Consequent to the said conciliation the said penal action shall lapse. The public prosecution/ court shall issue a stay of execution of the penalty if conciliation has taken place during execution of the same, or even after the judgment has become final and conclusive
Kuwait	Punishment by imprisonment for a term of not more than five years for persons who have intentionally committed market manipulations.
Mauritius	Liable to a fine not exceeding one million rupees together with imprisonment for a term not exceeding 5 years
Morocco	The Chairperson of the AMMC has a coercive power regarding Individuals and organizations subject to the supervision of the Authority, as listed in Article 4 of Law 43-12, and may impose disciplinary and / or pecuniary penalties against offenders, or apply to the competent judicial authority, after consulting the Enforcement Committee, for any infringement of the relevant legal provisions.
Saudi Arabia	The CMA has the power to initiate criminal proceedings in manipulation and other unfair trading practices stated in Articles 31, 49 and 50 of the Capital Market Law (CML). In addition to the penalties and financial compensation, the Committee for the Resolution of Securities Disputes may, based on a claim filed by the CMA, punish the

	persons who violate Articles 49 and 50 of the CML with imprisonment terms not
	exceeding five years.
South Africa	A person who commits a criminal offence referred to in Sections 78, 80 or 81 of the FMA, is liable on conviction to a fine not exceeding ZAR 50 million or to imprisonment for a period not exceeding 10 years, or to both such fine and such imprisonment.
UAE	The Federal Law (41 to 43) provides for those deemed to have broken the relevant law to be punished including terms of imprisonment of up to three years and a fine of not less than 100,000 Dirhams. The final draft of the new SCA law prescribes penalties that can reach 5 times the benefit or the cost avoided by the violation.
APRC Region	
Australia	With the exception of misleading or deceptive conduct, which attracts only civil liability, breaches of these provisions (market manipulation, false trading and market rigging, insider trading etc.) attract both criminal prosecutions and civil ramifications. Criminal penalties for an individual can include the greater of a fine of \$945,000 or an amount three times the value of benefits obtained through commission of the offence, imprisonment for ten years, or both. Fines for corporations of \$9,450,000 or higher in certain circumstances.
China	Where a violation is confirmed, the CSRC may impose penalties such as warnings, fines, market bar, etc., or refer it to the judicial department for prosecution of criminal liabilities.
Hong Kong	If the SFC found evidence of market manipulation, the SFC may either initiate prosecution of the suspect before the magistrates' courts for criminal proceedings (or refer the case to the Department of Justice) or institute proceedings before the Market Misconduct Tribunal. Under the criminal route, a person who is convicted of market or price manipulation is liable to a maximum fine of HK\$10,000,000 and imprisonment term of 10 years
India	Criminal sanctions for violation of SEBI Act, 1992. if any person contravenes or attempts to contravene or abets the contravention of the provisions of SEBI Act 1992 or of any rules or regulations made thereunder, he shall be punishable with imprisonment for a term which may extend to ten years, or with fine, which may extend to twenty five crore rupees or with both.
Japan	Market Manipulation – penalty imprisonment not more than 10 years or fine of not more than ¥10 million or both (but maximum fine of ¥30 million if act done for property benefit). Insider Dealing- penalty imprisonment not more than five years or fine of not more than ¥5 million or both.
New	Criminal liability for insider trading; false or misleading statement or information; and
Zealand Pakistan	false or misleading appearance of trading. Criminal provisions for insider trading, other market abuses, defective prospectus and operating without a license or other authority
Republic of Korea	Can refer matters to the public prosecutor's office
Singapore	In the course of discharging its market surveillance and supervisory functions, if the Exchanges find evidence of a possible breach of the law, it may refer the matter to the relevant government authority for criminal investigation and prosecution
Thailand	Equity Market Those who commit unfair trading activities in securities market as discussed in Key Question 1(a)-(d) shall be liable for imprisonment not exceeding 2 years or a fine from 500,000 to 2,000,000 Thai Baht or both provided by section 296 of SEA, except the following circumstances, which have been amended in the fifth amendment to SEA in order to respond to more serious offences or reflect accountability of responsible person: - market or price manipulation by placing a securities trading order or securities trading on a continuous basis with intention to cause price or volume of securities trading to be inconsistent with normal market condition is subject to imprisonment not

 exceeding 5 years or fine from 1,000,000 to 5,000,000 Thai Baht or both according to section 296/1 of SEA; misleading information by a director, manager or any person responsible for the operation of a securities issuing company is subject to imprisonment not exceeding 5 years or fine from 1,000,000 to 5,000,000 Thai Baht or both according to the operation of a securities from 1,000,000 to 5,000,000 Thai Baht or both according to the operation of a securities from 1,000,000 to 5,000,000 Thai Baht or both according to the operation of the operation oper
the second paragraph of section 296 of SEA.However, the offended cases under section 296 of SEA could be imposed by the Criminal Fining Committee. Otherwise, the SEC shall refer the case to DSI or other criminal authority for further legal proceeding.
In addition, the criminal sanctions also cover any person allowing other persons to use his securities account or bank account to conceal the identity of the account user in such a way that may use such account to commit an unfair according to section 297 of SEA.
Derivatives Market Those who commit market manipulation, misleading information or insider trading mentioned in Key Question 1(a), (b) and (c) respectively in derivatives market shall be liable for imprisonment not exceeding 5 years or a fine not exceeding 1,000,000 Thai Baht or not exceeding two times the benefit received or should have been received by such person as a result of contravention, whichever is higher, or both provided by sections 136 and 137 of DA, as the case may be.

ERC

EU jurisdictions (Croatia, Greece, Hungary, Ireland, Italy, Poland, Portugal and Romania): The EU's Market Abuse Regulation and Criminal Sanctions Market Abuse Directive require all member states to impose criminal sanctions for market abuse.

Albania	Information not available		
Croatia	Information not available		
Greece	The HCMC may refer market abuse cases to criminal prosecution authorities		
Hungary			
	The MNB as a national competent authority (NCA) - according to national law - has		
	the authority to impose administrative sanctions or measures for the infringements of		
	the Market Abuse Regulation (MAR) Articles 14 and 15 (insider dealing and market		
	manipulation). According to national law, the MNB's power is limited to impose		
	administrative sanctions or measures as NCA, but since the criminal sanctions are		
	incorporated into the national law, investigative authorities, other than the MNB could		
	impose criminal sanctions or measures, not only if their investigation ex officio states		
	the infringement for which the MNB in its own ex officio investigation imposed		
	administrative sanctions or measures. Furthermore, the criminal sanctions for infringements of Articles 14 and 15 of MAR were originally part of the national law,		
	but due to the implementation of the criminal sanction related parts of the Market		
	Abuse Directive (MAD), by also taking into consideration the related guidelines - the		
	relevant national measures have been revised and updated		
Ireland	The Central Bank has the power to initiate criminal proceedings for certain offences		
Israel	Criminal sanctions include imprisonment, fines which are calculated as a multiple of		
	the maximum alternative fine set under the Penal Code. Securities fraud, misleading		
	disclosure and the use of inside information by an insider are criminally enforceable		
	offenses.		
Italy	Market manipulation on listed instruments is criminally sanctioned under Article 185		
	of the Consolidated Law, according to which imprisonment for between one and six		
	years and a fine of between twenty thousand and five million EUR shall be imposed		
	on any person who disseminates false information or sets up sham transactions or		

	employs other devices concretely likely to produce a significant alteration in the price		
	of financial instruments.		
Poland	Information not available		
Portugal	Imprisonment for inside information or market manipulation offences		
Romania	The performance without authorization of any activities or operations; the intentional submission of inaccurate financial statements or false information regarding the company's financial standing; the intentional accessing of electronic trading, storage or clearing – settlement systems by unauthorized persons; the abusive use of inside information; Recommending or determining other person to participate at practices of abusive use of inside information; The illegal disclosure of inside information; Market manipulation) are available in primary capital market law and also, the general sanctions are available in criminal law. The FSA cannot impose other sanctions than administrative ones, but can refer a case to the prosecutor's office, who can impose criminal sanctions.		
Turkey	Information not available		
IARC Region			
Argentina	Information not available		
Bahamas	Criminal sanctions include imprisonment or the imposition of fines		
Brazil	Market manipulation and insider trading are also considered to be criminal offences.		
Canada	References can be made to Integrated Market Enforcement Team, Royal Canadian		
(Ontario and	Mounted Police or provincial and municipal police if there is evidence of criminal		
Quebec)	activity.		
Chile	Law establishes criminal sanctions. Offenders are exposed to penalties determined by		
	the courts, as a result of investigations carried out by the Public Prosecutor's Office.		
Mexico	Law provides for criminal sanctions (within the competence of the Judicial Authority)		
US CFTC	Section 6 of the CEA authorizes criminal penalties and sanctions for manipulation, attempted manipulation and all other willful violations of the CEA and CFTC regulations.		
US SEC	The SEC has civil law enforcement authority for the federal securities laws, as well as		
	the authority to refer such cases to federal and state criminal law enforcement authorities.		

ANNEXURE 8 - STOCK / BOND CONNECT – HONG KONG, SHANGHAI AND SHENZHEN STOCK EXCHANGES

Stock Connect

Stock Connect is a collaboration between the Hong Kong, Shanghai and Shenzhen Stock Exchanges. Stock Connect allows international and Mainland Chinese investors to trade securities in each other's markets through the trading and clearing facilities of their home exchange.

On 10 April 2014, the Securities and Futures Commission (SFC) and China Securities Regulatory Commission (CSRC) made a Joint Announcement regarding the in-principle approval for the development of Shanghai Connect for the establishment of mutual stock market access between Mainland China and Hong Kong.

It is the establishment of mutual market access between the Mainland and Hong Kong, with Shanghai and Shenzhen Connect for the stock market.

Shanghai Connect is a securities trading and clearing links programme developed by Hong Kong Exchanges and Clearing Limited (HKEX), Shanghai Stock Exchange (SSE) and China Securities Depository and Clearing Corporation Limited (CSDC), aiming to achieve a breakthrough in mutual market access between the Mainland and Hong Kong.

Under Shanghai Connect, The Stock Exchange of Hong Kong Limited (SEHK), a whollyowned subsidiary of HKEX, and SSE have established mutual order-routing connectivity and related technical infrastructure to enable investors of their respective market to trade designated equity securities listed in the other's market.

Hong Kong Securities Clearing Company Limited (HKSCC), also a wholly owned subsidiary of HKEX, and CSDC are responsible for the clearing, settlement and the provision of depository, nominee and other related services of the trades executed by their respective market participants and/or investors.

Shanghai Connect was launched on 17 November 2014. Shenzhen Connect was launched on 5 December 2016. The scheme now covers over 2,000 eligible equities in Shanghai, Shenzhen and Hong Kong.

Bond Connect

Bond Connect is a new mutual market access scheme that allows investors from Mainland China and overseas to trade in each other's bond markets through connection between the related Mainland and Hong Kong financial infrastructure institutions.

Northbound Trading commenced on 3 July 2017, allowing overseas investors from Hong Kong and other regions to invest in the China interbank bond market (CIBM) through mutual access arrangements in respect of trading, custody and settlement. Southbound Trading will be explored at a later stage.

ANNEXURE 9 – DEFAULT PROCEDURES

- 1. Default Procedures taking precedence over general insolvency law:
 - i. In Hong Kong, the law includes insolvency override provisions whereby the default proceedings and procedures of a clearing house take precedence over general insolvency law. These safeguards serve to minimize impact on other clearing participants, and consequently limit any market disruption as well.
 - ii. The regulatory framework in Singapore provides that default procedures established by MAS shall not be invalid at law by reason only of inconsistency with other laws relating to insolvency, bankruptcy or winding up, and that a relevant office holder or court applying insolvency laws in Singapore shall not prevent or interfere with these default procedures.
 - iii. In Canada (Ontario and Quebec), a federal legislation of Canada provides certain protections to settlement rules related to payments finality of clearing and settlement systems designated by the Bank of Canada which include systems operated by CDS and CDCC over any federal or provincial laws. The federal legislation also provide protection from bankruptcy or insolvency laws or court order with respect to termination, netting, and collateral enforcement. Certain exceptions exist for financial member institutions in resolution where the resolution authority, the CDIC, undertakes to provide financial assistance that the institution needs to discharge its obligations to the clearing house as they become due.
 - iv. In Italy, according to the rules transposing the settlement finality directive (SFD), the orders entered into designated systems to transfer financial instruments and payments are finally settled, regardless of whether the sending participant has become insolvent or transfer orders have been revoked in the meantime.
- 2. *Dedicated liquidation account:* In China, securities withheld are transferred to a dedicated liquidation account, where the clearing participant concerned shall be notified to make up for fund shortfalls or submit a settlement guarantee within a designated time limit. Where there are securities withheld, the supplementary funds or settlement collaterals fail to cover the amount of default, the CSDC may retain or transfer the clearing participant's proprietary securities and notify it upon their transfer to the dedicated liquidation account.
- 3. Representation by regulator and moving clients' positions to a solvent intermediary: In Saudi Arabia, the regulator CMA has full powers to take appropriate action in the event of default. The CMA's powers include the power to institute liquidation proceedings against an Authorized Person (AP). The CMA also may represent the interests of clients who may be entitled to the return of client money or assets in any insolvency, liquidation or settlement proceedings of an AP. The Authorised Persons Regulations also specify notice and pre-filing procedures to be followed by an AP proposing to commence settlement proceedings. In liquidation, the CMA may give instructions to the liquidator to establish client entitlements to client assets and securities. The CMA also may require a liquidator for an insolvent AP to move the clients' positions to a solvent intermediary. In the event of a liquidation of an AP, the CMA will coordinate with the Saudi Stock Exchange (Tadawul) in relation to dealing activities of the AP, which would include settlement proceedings to ensure that client money and assets are protected from the AP's default, and to terminate the AP's connectivity to the trading system.

ANNEXURE 10 – CONSULTATION ARRANGEMENTS

- 1. In Israel, in addition to cooperation agreement between ISA and the Bank of Israel relating to the payments and settlement system, there is a separate cooperation framework established by the three core financial market regulators under the MoU on Coordinated Capital Market Regulation and in the inter-ministerial forum for systematic risk.
- 2. In Portugal, cooperation amongst financial sector regulators is done at the Financial Supervisors National Committee (CNSF). Besides being stated in Law, exchange of information and cooperation between regulators is detailed in MoUs signed between the three financial sector supervisors. Accordingly, CMVM signed MoUs with the other two supervisors: (a) MoU with Banco de Portugal signed in January 2008; and (b) MoU with Insurance Supervisory Authority, signed in April 2008.
- 3. The Italian regulatory framework in the securities field with respect to authorized persons, wholesale markets for government securities and post-trading facilities operators, provides for shared responsibilities of the two competent authorities (B.I. and Consob), according to a functional approach. The Consolidated Law emphasizes the need for effective co-operation between the two authorities. It requires the B.I. and Consob to co-operate in a coordinated manner, with the view to minimizing the costs incurred by supervised intermediaries; it also states that the supervisory authorities may not invoke professional secrecy in their mutual relations. Cooperation with other domestic authorities is also regulated under the above mentioned Article 4 of the Consolidated Law. The authorities have signed protocols to regulate the exchange of information to complement the law provisions. There are no limitations on the type of information that can be shared with other domestic regulators insofar as the information is necessary to enable the recipient regulator to perform its functions.
- 4. In India, SEBI and the Reserve Bank of India (RBI) cooperate domestically through the Financial Stability Development Council. SEBI has prescribed market wide position limits for the members, clients, domestic and foreign institutions. The stock exchanges/ clearing corporations are required to coordinate among themselves in order to monitor the position limits for the participants and take necessary steps in case of breach of such limits. Additionally, SEBI has prescribed norms for sharing of information in case of declaration of member as defaulter in case of multiple memberships.

ANNEXURE 11: SHORT SELLING IN EQUITY MARKETS

Region	List of jurisdictions that allow short- selling	Short selling not permitted
AMERC	Angola. DIFC, ⁵⁵ Kuwait, ⁵⁶ Saudi Arabia, UAE, ⁵⁷ ADGM, ⁵⁸ Morocco, South Africa	Egypt, ⁵⁹ Mauritius
APRC	Australia, China, Hong Kong, India, Japan, Republic of Korea, New Zealand, Pakistan, Singapore, Thailand	-
ERC	Greece, Hungary, Ireland, Israel, Italy, Poland, Portugal, Romania, Turkey	Albania, Croatia
IARC	Brazil, Canada (Ontario and Quebec), Chile and US SEC	Argentina, Bahamas, Mexico and US CFTC

⁵⁵ Although the Nasdaq Dubai Business Rules permit covered short selling, due to current operational constraints it extremely costly to execute covered short-selling.

⁵⁶ In Kuwait, covered short sale is not allowed with the exception made for market makers.

⁵⁷ In UAE, as per SCA, UAE, the short selling Regulations permit short selling only in two cases (a) By a Market Maker to practice its activity in Market Making; and (b) Any other cases approved by SCA.

⁵⁸ While short selling is permitted, due to the nascent stage of the ADGM, short-selling is not technically operating on any market within ADGM

⁵⁹ Egypt is in the process of developing new legislations to regulate the short selling.

ANNEXURE 12: MiFID II

With the Markets in Financial Instruments Directive (MiFID), the EU has established a comprehensive set of rules on investment services and activities with the aim to promote financial markets that are fair, transparent, efficient and integrated.

The first MiFID directive came into force in 2007. However, after the 2008 financial crisis it became clear that a more robust regulatory framework was needed to further strengthen investor protection, to reduce trading carried out over-the-counter (OTC) and on non-regulated platforms and to address the development of new trading platforms and activities.

In June 2014, the European Parliament and the Council of the EU adopted new rules revising the MiFID framework. These consist of a directive (MiFID II⁶⁰) and a regulation (MiFIR⁶¹) which became applicable as from 3 January 2018. In order to strengthen the transparency and improve the functioning of the internal market for financial instruments, this new framework establishing uniform requirements for the transparency of transactions in markets for financial instruments was put in place.

Currently, MiFID II is being implemented across the EU. The following overview provides an insight to the EU's regulatory landscape:

MiFID II aims to reinforce the rules on securities markets by

- ensuring that organized trading takes place on regulated platforms,
- introducing rules on algorithmic and high frequency trading,
- improving the transparency and oversight of financial markets including derivatives markets and addressing some shortcomings in commodity derivatives markets,
- enhancing investor protection and improving conduct of business rules as well as conditions for competition in the trading and clearing of financial instruments.

The revised MiFID rules also introduce requirements on the organization and conduct of participants in these markets, such as investment firms and operators of a trading venue, and by strengthening the sanctioning powers of the NCAs.

MiFID II also implemented a number of measures to meet G20 commitments, in particular in relation to OTC derivatives. For example, it provides for enlarged supervisory powers, a trading obligation for derivatives on organized venues and a harmonized position-limits regime for commodity derivatives to improve transparency, support orderly pricing and prevent market abuse.

MiFIR, which unlike MiFID II, is directly applicable by all EU states, sets out requirements on:

- disclosure of data on trading activity to the public (pre-trade and post-trade transparency),
- disclosure of transaction data to regulators and supervisors,
- mandatory trading of shares and of certain derivatives on organized venues,
- removal of barriers between trading venues and providers of clearing services to ensure more competition, and

⁶⁰ https://ec.europa.eu/info/law/markets-financial-instruments-mifid-ii-directive-2014-65-eu_en

⁶¹ https://ec.europa.eu/info/law/markets-financial-instruments-mifir-regulation-eu-no-600-2014_en

• specific supervisory actions regarding financial instruments and positions in derivatives.

An example for enhanced transparency is that the European Securities and Markets Authority (ESMA) provides access to its Financial Instruments Reference Database (FIRDS) and Financial Instruments Transparency System (FITRS). ESMA collects trade execution data from trading venues and competent authorities and makes it available on its website in accordance with MiFIR transparency requirements.

To summarize, while already the previous legislation covers all of IOSCO's secondary and other market Principles (Principles 33 to 37), MiFID II / MiFIR introduce additional provisions in particular to the transparency and integrity of trading.