MiFID 2 - Direct Electronic Access, Algorithmic Trading and Third Country Access

VERSION 1.5.1 UPDATED AUGUST 2017

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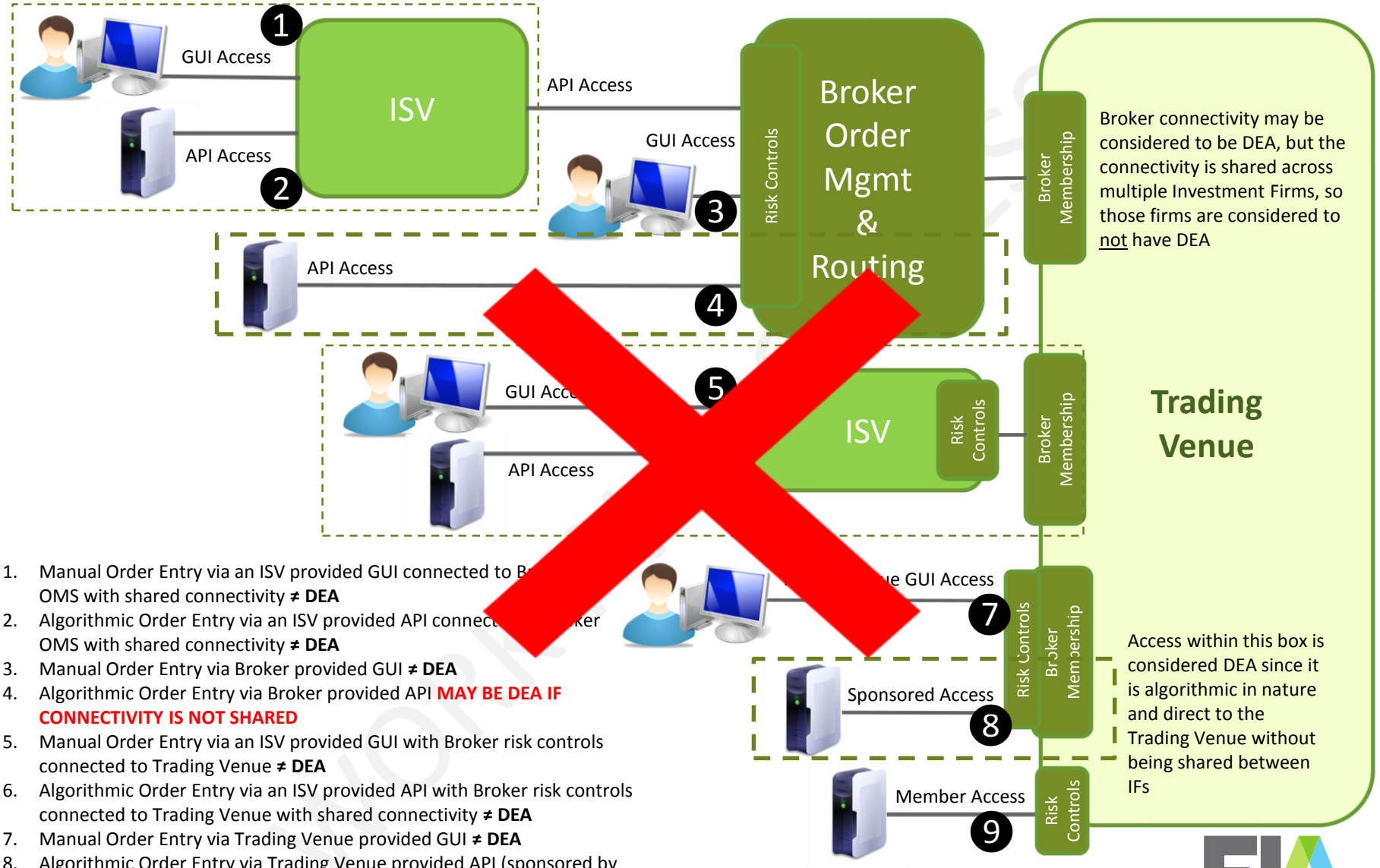

1. Manual Order Entry via an ISV provided GUI connected to B… OMS with shared connectivity ≠ **DEA**
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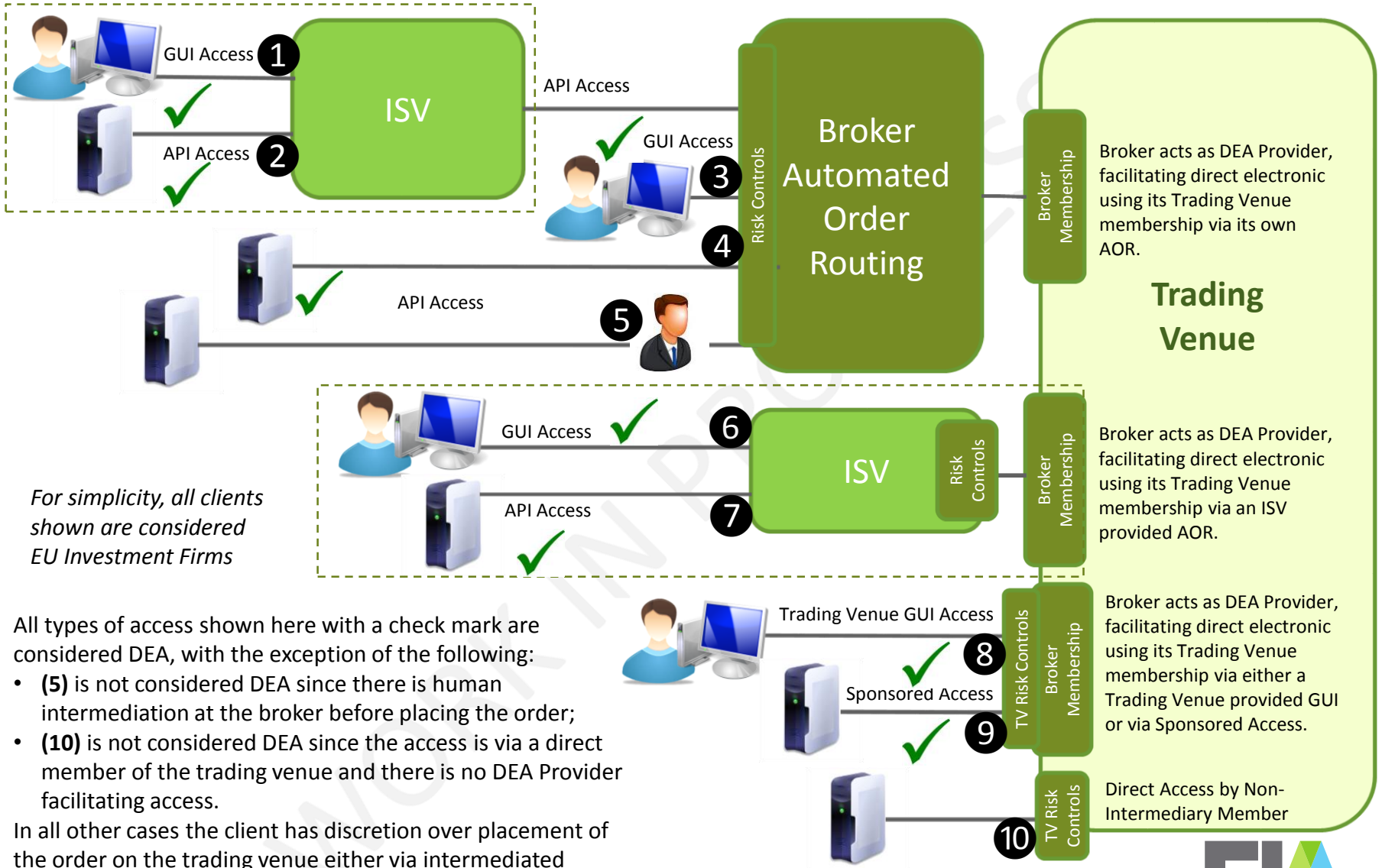
What is Considered DEA?
Version 2 – based on IOSCO definitions & RTS 6 outline principles



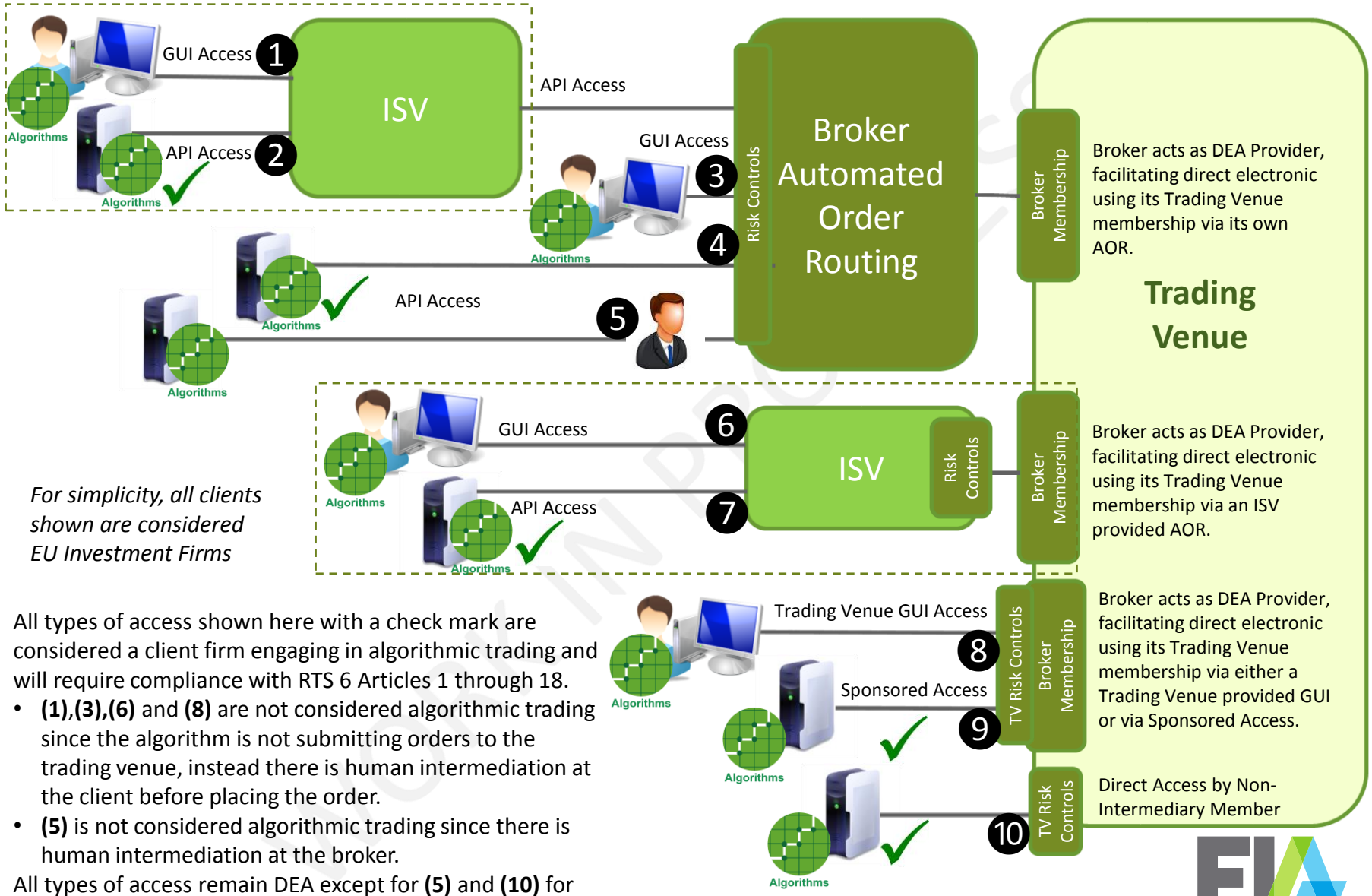
For simplicity, all clients shown are considered EU Investment Firms

All types of access shown here with a check mark are considered DEA, with the exception of the following:

- **(5)** is not considered DEA since there is human intermediation at the broker before placing the order;
- **(10)** is not considered DEA since the access is via a direct member of the trading venue and there is no DEA Provider facilitating access.

In all other cases the client has discretion over placement of the order on the trading venue either via intermediated automated order routing or non-intermediated sponsored access to the Trading Venue, and RTS 6 Articles 19 through 23 will apply.

Investment Firms Directly Engaged in Algorithmic Trading



For simplicity, all clients shown are considered EU Investment Firms

All types of access shown here with a check mark are considered a client firm engaging in algorithmic trading and will require compliance with RTS 6 Articles 1 through 18.

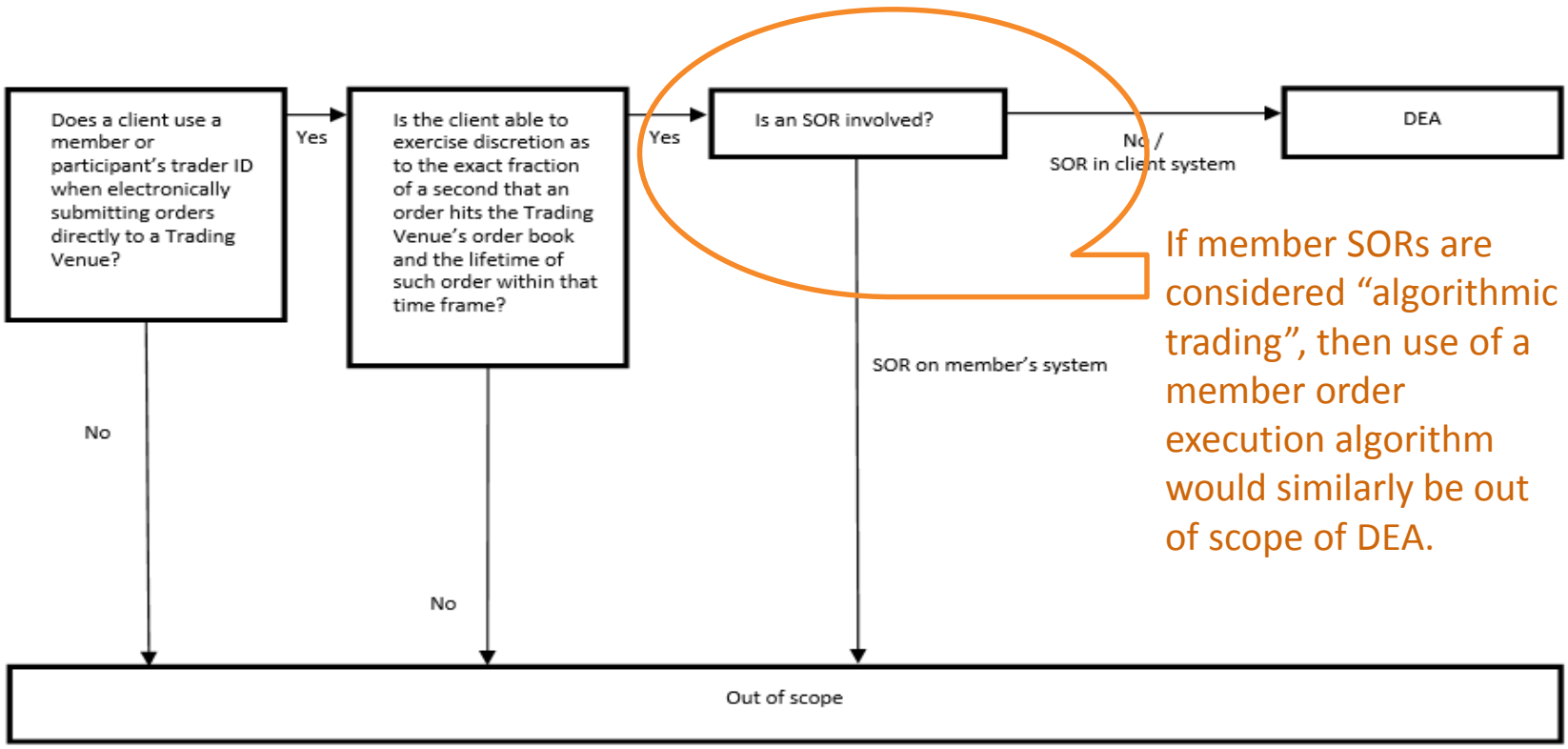
- **(1),(3),(6)** and **(8)** are not considered algorithmic trading since the algorithm is not submitting orders to the trading venue, instead there is human intermediation at the client before placing the order.
- **(5)** is not considered algorithmic trading since there is human intermediation at the broker.

All types of access remain DEA except for **(5)** and **(10)** for the reasons described on the previous slide.

DEA Flowchart, from Katten Draft MiFID II Briefing Notes, March 2 2017

DEA – ANNEX

FLOWCHART

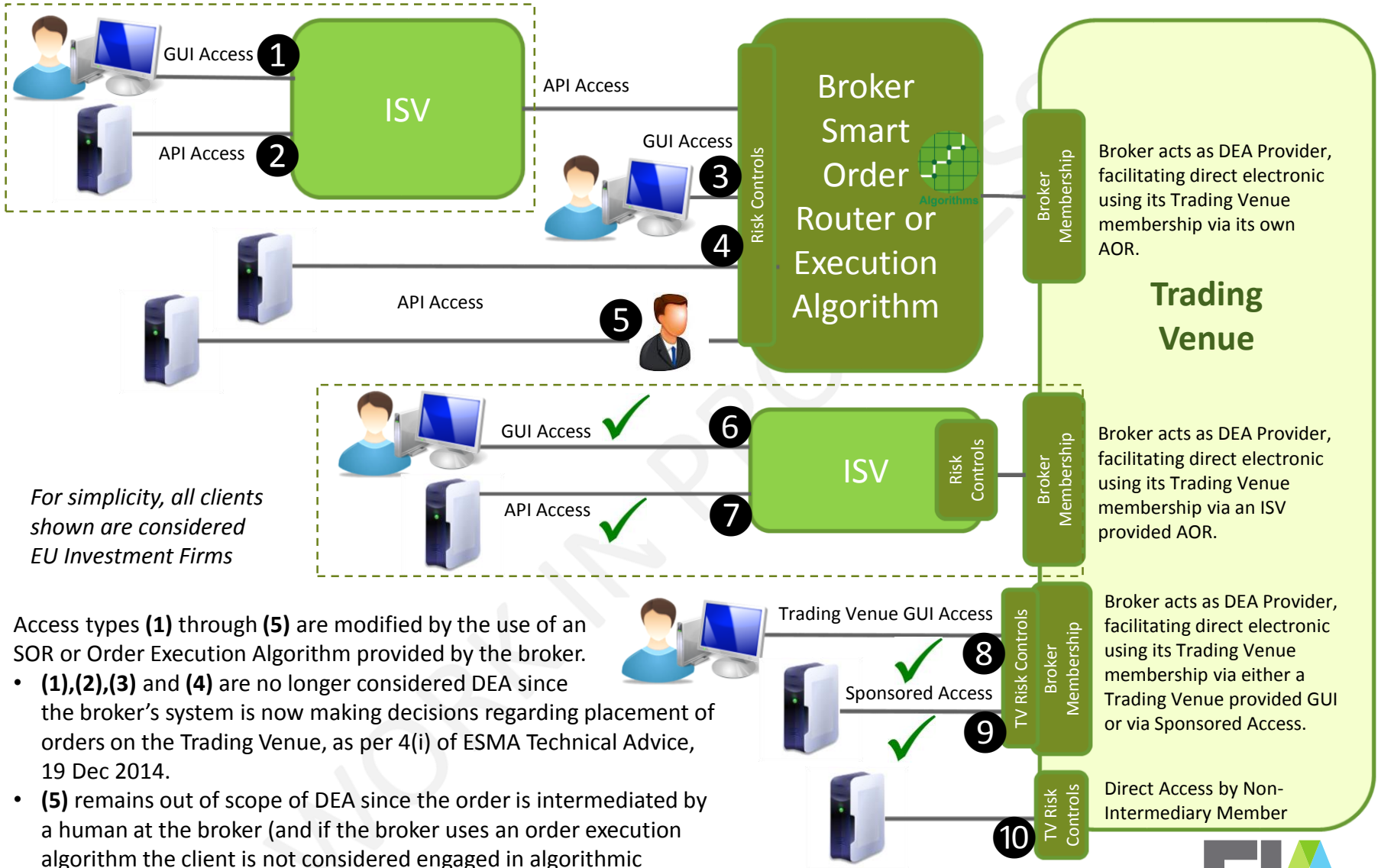


If member SORs are considered "algorithmic trading", then use of a member order execution algorithm would similarly be out of scope of DEA.

NB: Capitalised terms are defined in the accompanying Briefing Note.

IMPORTANT NOTE: This flowchart is intended to provide an indicative overview of the application of MiFID II's DEA regime. It does not constitute legal advice of any kind and does not, and does not purport to, describe all material relating to the relevant subject matter. It should be read in conjunction with the accompanying briefing note and should not be relied upon in connection with any particular transaction or otherwise.

What is Considered DEA?
Broker Execution Algorithms (including Smart Order Routers)

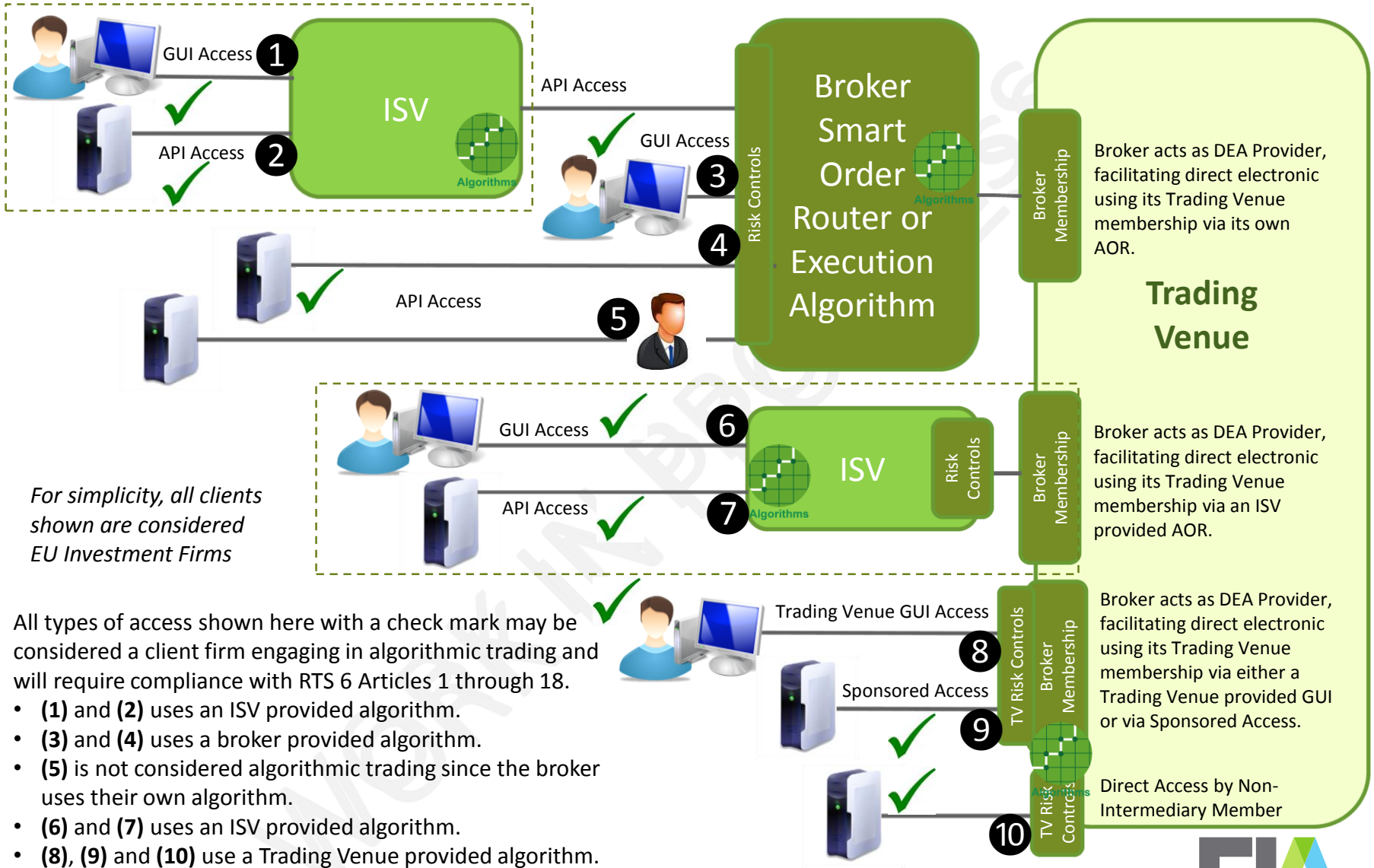


Access types **(1)** through **(5)** are modified by the use of an SOR or Order Execution Algorithm provided by the broker.

- **(1),(2),(3)** and **(4)** are no longer considered DEA since the broker's system is now making decisions regarding placement of orders on the Trading Venue, as per 4(i) of ESMA Technical Advice, 19 Dec 2014.
- **(5)** remains out of scope of DEA since the order is intermediated by a human at the broker (and if the broker uses an order execution algorithm the client is not considered engaged in algorithmic trading, as per ESMA Q&A Answer 2, 31 Jan 2017);

All types of access shown here with a check mark are considered DEA.

Investment Firms Indirectly Engaged in Algorithmic Trading (Broker, ISV and Trading Venue provided Algorithms)



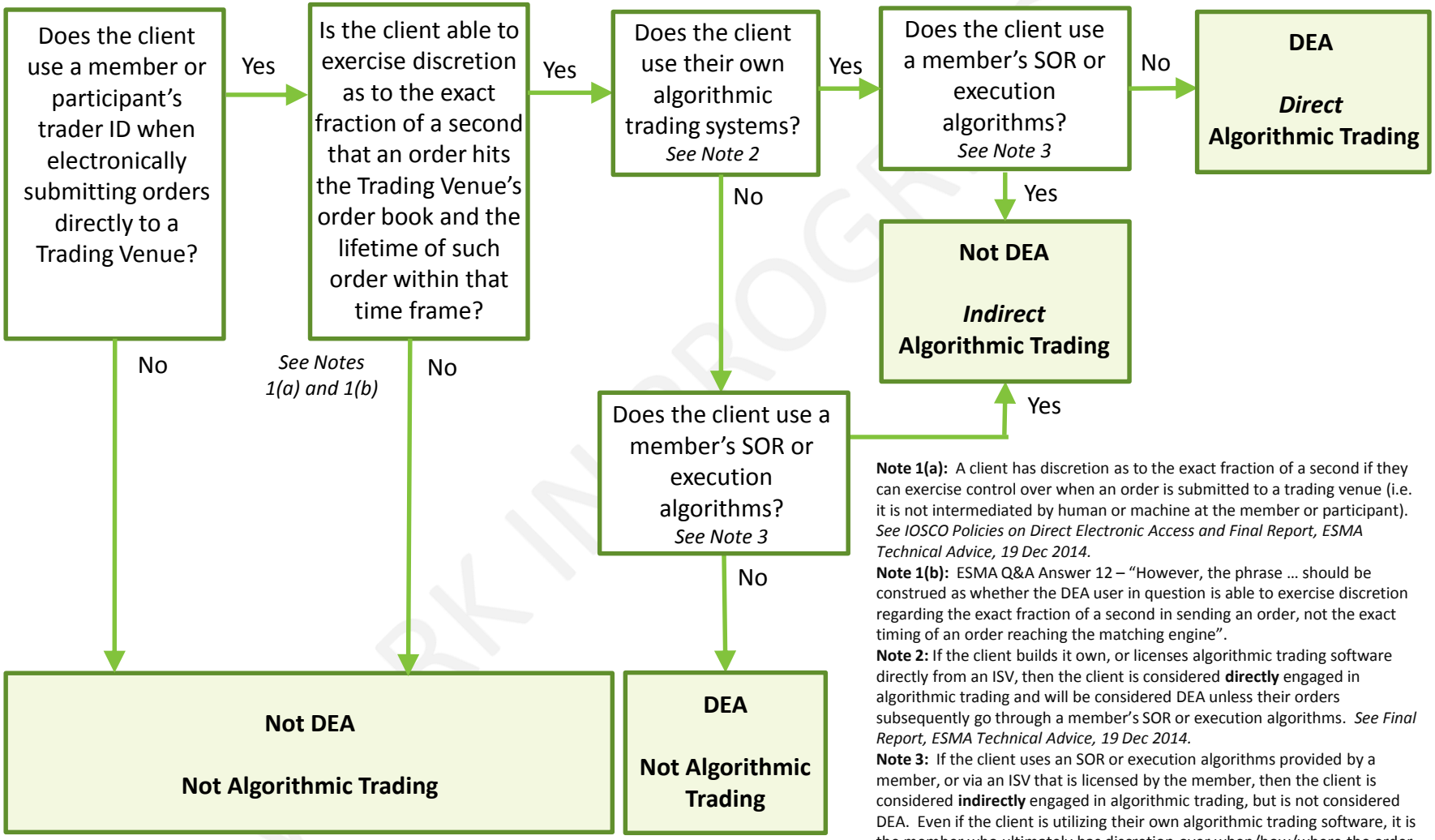
For simplicity, all clients shown are considered EU Investment Firms

All types of access shown here with a check mark may be considered a client firm engaging in algorithmic trading and will require compliance with RTS 6 Articles 1 through 18.

- **(1)** and **(2)** uses an ISV provided algorithm.
- **(3)** and **(4)** uses a broker provided algorithm.
- **(5)** is not considered algorithmic trading since the broker uses their own algorithm.
- **(6)** and **(7)** uses an ISV provided algorithm.
- **(8)**, **(9)** and **(10)** use a Trading Venue provided algorithm.

Delegated Act - European Commission (2398) 24-04-2016 : Article 18 Algorithmic trading (Article 4(1)(39) - For the purposes of further specifying the definition of algorithmic trading …, a system shall be considered as having no or limited human intervention where, for any order or quote generation process or any process to optimise order-execution, an automated system makes decisions at any of the stages of initiating, generating, routing or executing orders or quotes according to pre-determined parameters.

DEA and Algorithmic Trading Flowchart - Version 3 (Client does not have direct membership of Trading Venue)



Note 1(a): A client has discretion as to the exact fraction of a second if they can exercise control over when an order is submitted to a trading venue (i.e. it is not intermediated by human or machine at the member or participant). *See IOSCO Policies on Direct Electronic Access and Final Report, ESMA Technical Advice, 19 Dec 2014.*

Note 1(b): ESMA Q&A Answer 12 – "However, the phrase … should be construed as whether the DEA user in question is able to exercise discretion regarding the exact fraction of a second in sending an order, not the exact timing of an order reaching the matching engine".

Note 2: If the client builds it own, or licenses algorithmic trading software directly from an ISV, then the client is considered **directly** engaged in algorithmic trading and will be considered DEA unless their orders subsequently go through a member's SOR or execution algorithms. *See Final Report, ESMA Technical Advice, 19 Dec 2014.*

Note 3: If the client uses an SOR or execution algorithms provided by a member, or via an ISV that is licensed by the member, then the client is considered **indirectly** engaged in algorithmic trading, but is not considered DEA. Even if the client is utilizing their own algorithmic trading software, it is the member who ultimately has discretion over when/how/where the order is placed on the trading venue. See *Final Report, ESMA Technical Advice, 19 Dec 2014.*

For simplicity, additional decision points regarding whether a client is engaged in HFT are omitted.

Direct Electronic Access Summary

Direct Electronic Access

- **Delegated Act, Article 20 Direct electronic access (Article 4(1)(41) of Directive 2014/65/EU)**

  1. A person shall be considered not capable of electronically transmitting orders relating to a financial instrument directly to a trading venue in accordance with Article 4(1)(41) of Directive 2014/65/EU where that person cannot exercise discretion regarding the exact fraction of a second of order entry and the lifetime of the order within that timeframe.

  2. A person shall be considered not capable of such direct electronic order transmission where it takes place through arrangements for optimisation of order execution processes that determine the parameters of the order other than the venue or venues where the order should be submitted, unless these arrangements are embedded into the clients' systems and not into those of the member or participant of a regulated market or of an MTF or a client of an OTF.

  Extract - Delegated Act - European Commission (2398) 24-04-2016

- The concept of DEA is intended to cover all forms of electronic access where a client may interact directly with the Trading Venue order book, including algorithmic trading and traditional point-and-click style trading via a broker or ISV provided GUI, with the exception of:
  - Orders intermediated by a person at the broker facilitating access to the Trading Venue, which includes orders that are transmitted electronically but the client does not have discretion as to the exact fraction of a second that an order hits the Trading Venue's order book and the lifetime of such order within that time frame (intended to exclude online brokerage);
  - Orders submitted using Smart Order Routers provided by the broker/member, which are considered to fall under the category of ***Algorithmic Trading***, and do not constitute DEA.
  - Orders submitted using an execution algorithm provided by the broker/member, which are also which are considered to fall under the category of ***Algorithmic Trading***, and do not constitute DEA.
- ***Direct Electronic Access*** must consist of both a DEA Client and a DEA Provider who facilitates access to a Trading Venue through its trader ID as a member or participant of that venue.

Algorithmic Trading Summary

Algorithmic Trading

- **Delegated Act Article 18 Algorithmic trading (Article 4(1)(39) of Directive 2014/65/EU)**

  For the purposes of further specifying the definition of algorithmic trading in accordance with Article 4(1)(39) of Directive 2014/65/EU, a system shall be considered as having no or limited human intervention where, for any order or quote generation process or any process to optimise order-execution, an automated system makes decisions at any of the stages of initiating, generating, routing or executing orders or quotes according to pre-determined parameters.

  Extract - Delegated Act - European Commission (2398) 24-04-2016

- As such, all forms of automated trading fall into scope of algorithmic trading, with the exception of the following:
  - Orders that are generated from an investment decision algorithm at the client that are electronically entered by a person at the client;
  - Orders that are electronically entered that are subsequently intermediated by a person at the broker/member – even if the broker/member chooses to utilize an order execution algorithm, the client is not considered to be engaged in algorithmic trading.
- Clients utilizing order execution algorithms provided by a broker/member, ISV or Trading Venue are considered to be ***indirectly*** engaging in algorithmic trading*. The provider of the algorithms will need to comply with algorithmic trading requirements detailed in RTS 6 (including due diligence regarding the outsourcing or procurement of algorithmic trading software).

  * Clients may have additional requirements from NCAs regarding their use of such algorithmic tools but no further obligations under MiFID II.

- DEA is possible without engaging in algorithmic trading, but ***direct*** algorithmic trading is not possible without DEA (unless a firm is a non-intermediary market member with direct access, in which case there is no DEA Provider but the firm may still engage in algorithmic trading).

DEA and Sub-Delegation Overview

Extract – IOSCO POLICIES ON DIRECT ELECTRONIC ACCESS – February 2009

Some markets permit sub-delegation of a Customer's DEA access to another party, i.e., where a DEA Customer is permitted to delegate its access privileges directly to another Customer. This is used primarily to accommodate structures of the market-member whose affiliates have DEA Customers outside of the jurisdiction. There are rarely any specific market rules to regulate the sub-delegation.

Extract - RTS 6 – European Commission (4478) 19-07-2016

Article 21 Specifications for the systems of DEA providers

4. A DEA provider allowing a DEA client to provide its DEA access to its own clients ('sub-delegation') shall be able to identify the different order flows from the beneficiaries of such sub-delegation without being required to know the identity of the beneficiaries of such arrangement.

Article 22 Due diligence assessment of prospective DEA clients

3. A DEA provider allowing sub-delegation shall ensure that a prospective DEA client, before granting that client access, has a due diligence framework in place that is at least equivalent to the one described in paragraphs 1 and 2.

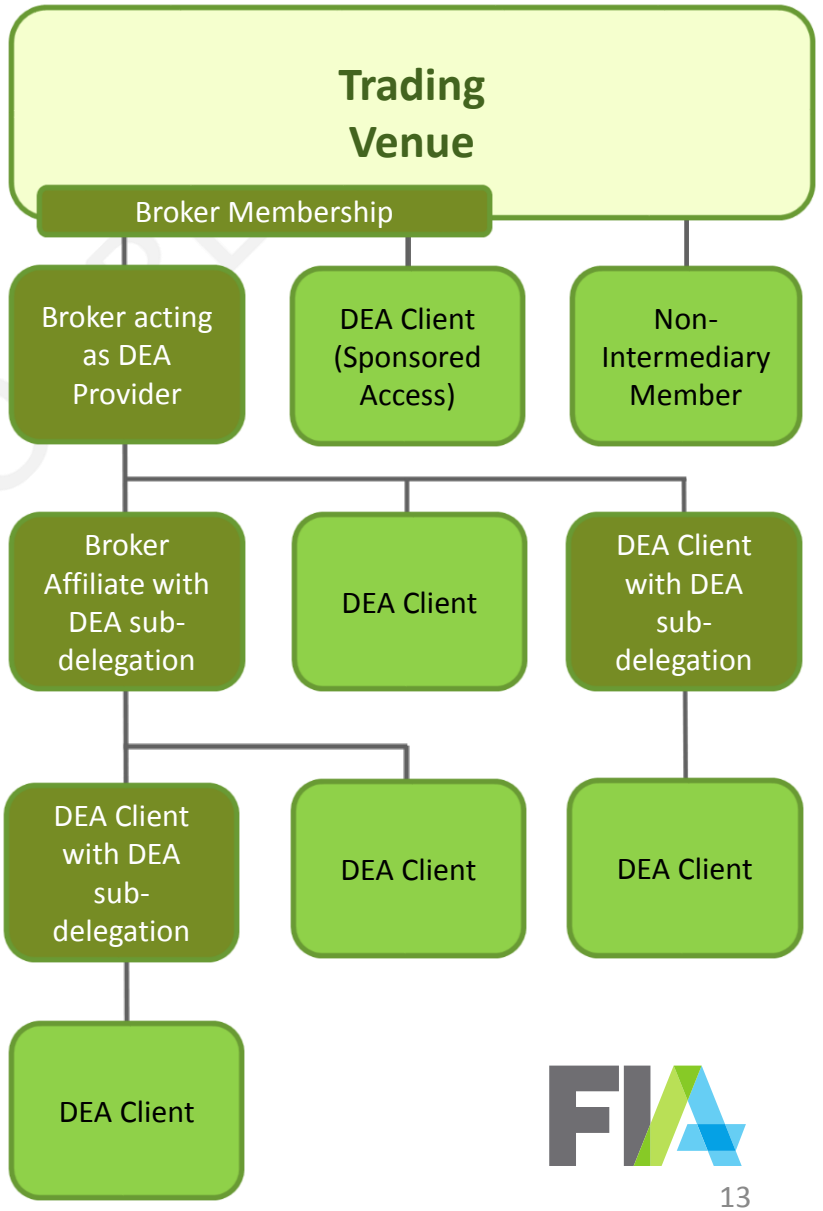
Article 23 Periodic review of DEA clients

1. A DEA provider shall review its due diligence assessment processes annually.

2. A DEA provider shall carry out an annual risk-based reassessment of the adequacy of its clients' systems and controls, in particular taking into account changes to the scale, nature or complexity of their trading activities or strategies, changes to their staffing, ownership structure, trading or bank account, regulatory status, financial position *and whether a DEA client has expressed an intention to sub-delegate the access it receives from the DEA provider.*

Extract - RTS 7 – European Commission (4387) 14-07-2016

(15) The provision of direct electronic access (DEA) service to an indeterminate number of persons may pose a risk to the provider of that service and also to the resilience and capacity of the trading venue where the orders are sent. *To address such risks, where trading venues allow sub-delegation, the DEA provider should be able to identify the different order flows from the beneficiaries of sub-delegation.*



DEA and Sub-Delegation Principles and Practices

Sub-Delegation Principles

- The IOSCO policies on Direct Electronic Access recognize that it is possible for a member (customer) of a trading venue (market) to delegate its access privileges directly to another customer, typically used to facilitate access from other jurisdictions, and that this sub-delegation is rarely regulated directly.
- RTS 6 and RTS 7 address sub-delegation by requiring the identification of different beneficiaries' order flow, without the investment firm acting as the DEA Provider being required to know the actual identity behind the order flow. RTS 6 emphasizes that a DEA Provider should conduct due diligence regarding its clients regarding whether they will sub-delegate DEA to their customers, as well as ensuring that there is an appropriately equivalent due diligence process in place to that required of the DEA Provider by RTS 6 Article 22(1) and (2).

Sub-Delegation Practice

- It is possible for an investment firm that has DEA to delegate that access to its customers. Access to the trading venue may be through an investment firm's own membership of the trading venue, or through a sponsored access arrangement (where permitted) with a member of the venue.
- In practice, such sub-delegation of DEA typically occurs in limited scenarios, most notably:
  - Through an affiliate of an investment firm;
  - Through a client-broker relationship where the broker knows that the client's business model facilitates access by clients of that client.

DEA and Sub-Delegation to an Affiliate

Sub-Delegation to an Affiliate

- Such sub-delegation is typical where an investment firm (for example a broker/dealer member or general clearing member of a trading venue) facilitates access to a market on behalf of its affiliates regionally or globally. Such affiliates typically operate in a similar capacity for trading venues in other jurisdictions, and sub-delegation arrangements allow clients to access markets globally without being required to enter into trading relationships with multiple entities globally.
- Where an affiliate facilitates DEA to its customers, the affiliate typically has a client relationship with the local investment firm - usually through an omnibus account at the local investment firm acting as the DEA Provider, which allows individual client positions to be aggregated at the DEA Provider before being allocated to the clients of the affiliate.
- Such arrangements typically require clear identification of both the client and its account(s) in order to facilitate correct allocation of positions, monies, fees, etc., to the appropriate beneficiary.
- It is possible for an affiliate to enter into a relationship with a client that allows for further sub-delegation of access; where such a relationship occurs the same principles of identification of both client and account are required to ensure correct allocation of positions, monies, fees, etc.
- All sub-delegation of DEA should take into account that RTS 6 article 21(4) and RTS 7 recital 15 require clear identification of individual clients all the way through to the trading venue, and that clients should not be masked through the sub-delegation process.
- RTS 6 article 22(3) requires appropriate due diligence on all prospective DEA clients to ensure that they have equivalent due diligence frameworks in place if they sub-delegate, and RTS 6 article 23(2) requires annual review to highlight if an existing DEA client wishes to sub-delegate access.

DEA and Sub-Delegation to a Client

Sub-Delegation to a Client

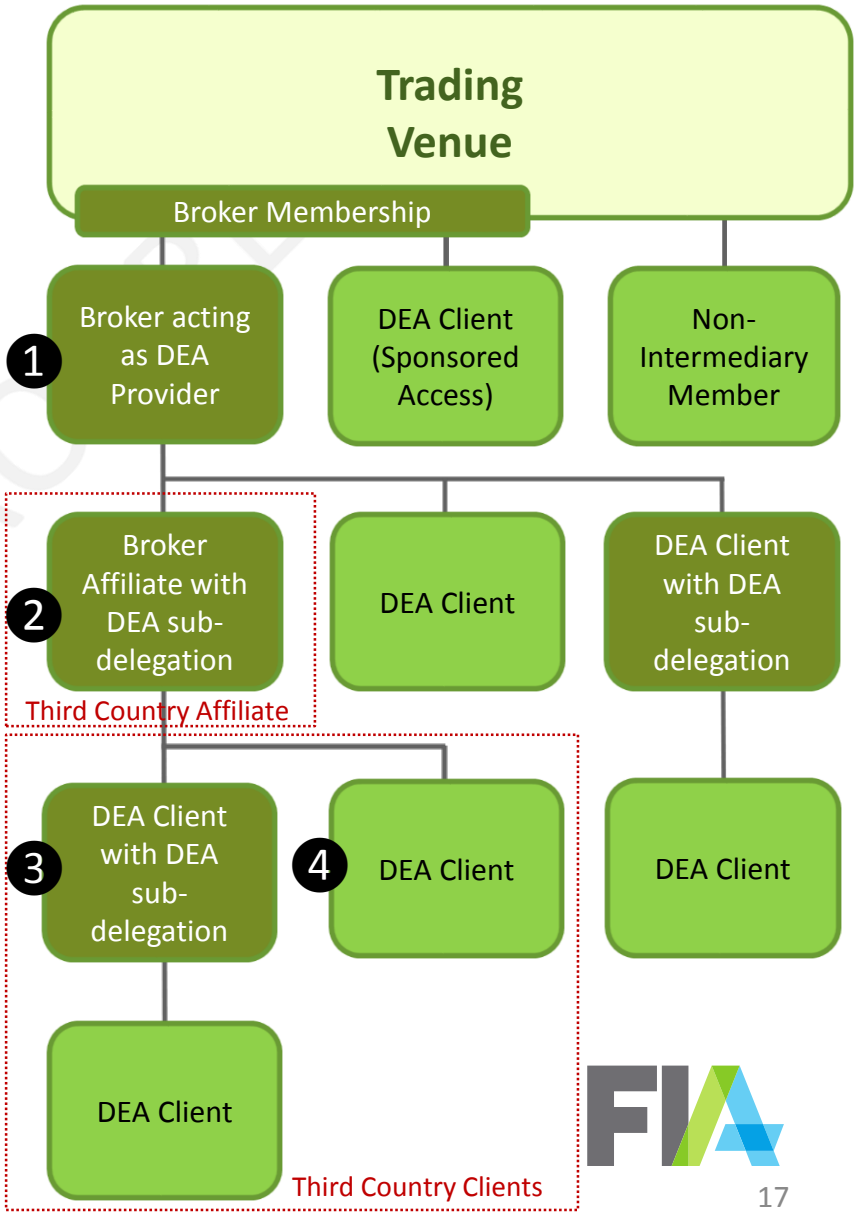
- Such sub-delegation is typical where an investment firm (for example a broker/dealer member or general clearing member of a trading venue) facilitates access to a market on behalf of its clients regionally or globally, and those clients have a direct relationship with the investment firm rather than an affiliate (q.v.).
- Such arrangements typically require clear identification of both the client and its account(s) in order to facilitate correct allocation of positions, monies, fees, etc., to the appropriate beneficiary.
- DEA could be through the investment firm's own infrastructure (DMA) or sponsored access where permissible.
- It is possible for a client to enter into a relationship with another client that allows for further sub-delegation of access; where such a relationship occurs the same principles of identification of both client and account are required to ensure correct allocation of positions, monies, fees, etc.
- As already commented, all sub-delegation of DEA should take into account that RTS 6 article 21(4) and RTS 7 recital 15 require clear identification of individual clients all the way through to the trading venue, and that clients should not be masked through the sub-delegation process.
- RTS 6 article 22(3) requires appropriate due diligence on all prospective DEA clients to ensure that they have equivalent due diligence frameworks in place if they sub-delegate, and RTS 6 article 23(2) requires annual review to highlight if an existing DEA client wishes to sub-delegate access.

DEA and Sub-Delegation – Third Country Impact on ETD

This diagram reflects how DEA sub-delegation typically applies to third country firms within the Exchange Traded Derivatives (ETD) space.

- A MiFID 2 authorized investment firm acts as DEA Provider ❶.
- This firm sub-delegates DEA to the Trading Venue by its overseas affiliate ❷.
- As per RTS 6 Article 22(3), the DEA Provider ensures that its affiliate has a due diligence framework in place that is at least equivalent to what it is required to comply with under RTS 6 Article 22(1) and (2).
- The overseas affiliate with sub-delegation of DEA provides access to clients within its country or region. These clients may facilitate further sub-delegation of DEA ❸, or be an end-user of DEA ❹.
- DEA clients at the third and fourth tier of the diagram will be subject to pre-trade risk controls at the level of the DEA Provider and its affiliate.

Please note that the diagram is intended to represent a simplified view of third country access for ETD through an affiliate structure. It is possible that any client represented in tiers 1 through 4 may be a third country firm. However the representation as illustrated is typical of how a broker providing DEA across jurisdictions facilitates access to a trading venue through sub-delegation of responsibilities to its affiliates.



Third Country Exemption and Equivalence Rules (see Appendices for Rules)

France	Germany	Italy	Netherlands	Spain	Sweden	United Kingdom
Euronext Paris	Eurex	Borsa Italiana (IDEM)	Euronext Amsterdam	MEFF	Nasdaq OMX	ICE Europe, LME
AMF (equivalence in place)	BaFin (equivalence proposed)	ConSob	AFM (equivalence in place)	CNMV (equivalence in place)	Finans-inspektionen	FCA (exemption in place)
Article 513-3 Where a market member is based outside a State party to the European Economic Area agreement, admission is conditional on there being a cooperation and information sharing agreement between the AMF and the competent authority in the member's home country. Notwithstanding the first paragraph, the market operator may enter into agreements with recognised markets, within the meaning of Article L. 423-1 of the Monetary and Financial Code and decree 90-948 of 25 October 1990, whereby the members of one market are recognised as members of the other market, and vice versa.	*Norton Rose Fulbright Note: The new paragraph (5) to § 2 KWG would permit BaFin (as the "Bundesanstalt") to exempt from authorisation third country persons that engage in investment activities in Germany or provide investment services in Germany for which authorisation is required on the condition that the third country person is subject to equivalent supervision in its home jurisdiction such that additional BaFin supervision may be considered unnecessary (p.129 of the proposal).* *It is assumed that BaFin would exempt under § 2(5) KWG only third country persons that are:* *(a) authorised and supervised to engage in or provide the same investment activities and/or services in its home jurisdiction, and* *(b) authorised and supervised in a jurisdiction in which BaFin is confident of the legal and supervisory arrangements.*		**AFM - Information for Professionals – Digital Portal 15/5/2017**… Investment firms with their registered office in Australia, the United States or Switzerland should use the exemption form also listed in the digital portal. This is a national regime for the Netherlands only (no passports available). Investment firms with their registered office in other non member states need to obtain a licence in the Netherlands. …	**ACT 24/1988, OF 28 JULY, ON THE SECURITIES MARKET (updated July 2012)** **Article 37(2)(d)** Investment firms and credit institutions authorised in a country that is not a Member State of the European Union provided that, in addition to complying with the requirements laid down in Title V of this Act for operating in Spain, the authorisation given by the authorities in the home country enables them to execute client orders or trade for their own account. The Minister of Economy and Finance may deny those entities access to Spanish markets or impose conditions upon access, for prudential reasons, where Spanish entities are not given equivalent treatment in the home country or where compliance with the rules of order and discipline in the Spanish securities markets is not guaranteed.		**2001 No. 544 FINANCIAL SERVICES AND MARKETS** **The Financial Services and Markets Act 2000 (Regulated Activities) Order 2001** Overseas persons [Exemption] (1) An overseas person does not carry on an activity of the kind specified by **article 14 (Dealing in investments as principal)** (2) An overseas person does not carry on an activity of the kind specified by **article 21 (Dealing in investments as agent)**. …

Appendix 1

IOSCO and MiFID 2 Supporting Text

Extract – IOSCO POLICIES ON DIRECT ELECTRONIC ACCESS – February 2009

http://www.iosco.org/library/pubdocs/pdf/IOSCOPD284.pdf

II. Background and Purpose

As the way in which exchanges and other markets operate has evolved, so too has the means of access to these markets. Securities and derivatives exchanges are overwhelmingly electronic, which has facilitated their operations globally through various forms of communication. Spurred by the increasing demand by customers for access to global markets, the means to access markets has evolved through continual innovation.

There are divergent understandings of the term "**direct electronic access**" (**DEA**). Nonetheless, there is general agreement that DEA falls into two key categories: intermediated and nonintermediated.

For purposes of this Report, "intermediated" **DEA** generally refers to:

(a) Customers being given direct access to the market through a registered intermediary's system/infrastructure, i.e. automated "order routing;" or

(b) Customers of an intermediary being given direct access to the market without going through the intermediary's system/infrastructure, i.e., "sponsored" access.

In either case, however, the order is sent to the market as the intermediary's order, i.e., using the intermediary's trading ID (aka mnemonic). The intermediary therefore retains full responsibility for the order.

Non-intermediated direct access generally refers to markets providing direct access to nonintermediaries (i.e., parties other than registered brokerage firms), as market-members and in that capacity connecting directly to the market, without going through an intermediary. The Report refers to this type of **DEA** as direct access by non-registrant/non-intermediary market-members.

Thus, **DEA**, as used in this Report, refers to automated order routing systems, sponsored access, and direct access by non-registrant/non-intermediary market members. We recognize that the latter category may not always raise the same issues when compared to the other two. For example, there may be less of a concern with regard to compliance with market rules. Nonetheless, as noted later in this report, credit risk is a key concern raised by **DEA** arrangements and the non-registrant/non-intermediary market-member poses potentially substantial credit risk to the clearing firm that is also a member of the market.

The ability to transmit orders directly to a market in real time gives **DEA** users greater control over their trading decisions and reduces latency of execution time. Overall, the different means of accessing markets electronically has facilitated the establishment of a globally competitive market, and has greatly benefited market participants and their Customers by permitting them to transact complicated investment and hedging strategies on a global basis in a matter of milliseconds. The use of electronic systems also has regulatory benefits, such as the generation of electronic audit trail data, and the enhancement of both trade transparency and the ability of markets, intermediaries and other market members to develop and apply automatic risk management controls.

Nonetheless, the work undertaken by TCSC2 and TCSC3 has identified areas of concern where market authoritie3 may determine that guidance is appropriate. For example, **DEA** has introduced several regulatory challenges to markets, intermediaries and their regulators.

Although the nature of the challenges varies depending upon the type of **DEA**, they include:

- Allowing users to access markets outside of the infrastructure and/or control of market intermediaries, which challenges intermediaries' traditional risk management approaches and may make rule compliance and monitoring more difficult; for instance regarding market manipulation and insider dealing
- The creation of incentives for intermediaries/Customers to gain execution advantages based on the type and geographic location of their connectivity arrangements, which raises potential "fairness;" and
- Facilitating algorithmic trading through automated systems, which raises issues of capacity and the potential need for rationing bandwidth. Indeed, some "black box" trading systems are capable of transmitting several thousand order messages to a market in less than a second.

This Report describes current **DEA** arrangements, as well as the regulatory approaches of TCSC2 and TCSC3 member jurisdictions. It also identifies the commonalities and differences in approaches as they relate to the controls imposed by intermediaries on Customers' direct access to the market for purposes of placement of orders and intermediaries' ability to review trades on a pre- or post-execution basis . However, the Report does not attempt to describe in technical detail the specific features of the multitude of **DEA** systems in existence. Indeed, the technical nature of electronic access systems is complex, varied and constantly changing. It is hoped, however, that publication of this report will facilitate a better understanding of the different ways that direct access is regulated and how markets address the relevant issues.

The Report identifies and discusses the benefits, potential risks and concerns that are associated with the use of **DEA** arrangements that permit Customers of intermediaries and non-intermediary market-members to enter orders directly into a market's trade matching system for execution. It also evaluates the information obtained from markets, intermediaries, and market authorities, both in response to written questionnaires and presentations.

III. Relevant DEA Arrangements

TCSC2 and TCSC3 were confronted by a diversity of terminology used to describe the specific arrangements of **DEA** in various jurisdictions and markets (e.g., "**direct access**", "**direct market access**", "**pure direct market access**", "**intermediated access**", and "**sponsored access**"). It was learned that these terms of art may be understood by market participants in a particular jurisdiction as having a specific meaning in relation to local market structures. These terms, however, may either not reflect the **DEA** arrangements that exist in other jurisdictions or, even if used, have a different meaning. Both TCSC2 and TCSC3 attempted to manage this problem and avoid confusion by adopting similar definitions within their surveys. *See Appendix 1*.

Extract – IOSCO POLICIES ON DIRECT ELECTRONIC ACCESS – February 2009 (cont.)

However, for both surveys (and thus also for this Report), the trading model of a Customer calling the intermediary or sending an internet order to the intermediary was not considered to be "direct access."

For the purposes of this Report, **DEA** is defined as the following three major pathways:

- **Automated Order Routing**

  Through Intermediary's Infrastructure (AOR) This describes a situation where an intermediary, who is a market-member, permits its Customers to transmit orders electronically to the intermediary's infrastructure (i.e., system architecture, which may include technical systems and/or connecting systems), where the order is in turn automatically transmitted for execution to a market under the intermediary's market-member ID (mnemonic). In this case, the intermediary retains the ability to monitor internally and, if necessary, stop an order before it is executed. Such access is often referred to as "automated order routing."

- **Sponsored Access (SA)**

  This describes a situation where an intermediary, who is a market-member, may permit its Customers to use its member ID (mnemonic) to transmit orders for execution directly to the market without using the intermediary's infrastructure. In this case, the intermediary is not able to use the internal controls applied with respect to AOR (e.g., does not have a real time view and cannot stop an order).

- **Direct Access by Non-Intermediary Market-Members**

  This describes a situation where an entity that is not registered as an intermediary, such as a hedge fund or proprietary trading group, becomes a market-member, and in that capacity connects directly to the market's trade matching system using its own infrastructure and member ID (mnemonic). Such non-registrant members are generally not eligible to become a clearing member of the market and must enter into a clearing arrangement with and become a Customer of a clearing member intermediary.

IV. Description of DEA Arrangements

A. Introduction

The various permutations of **DEA** described above, and in particular AOR and **SA**, could widen the class of persons able to enter orders directly into a market's trade matching system. In addition, although TCSC2's survey revealed that some markets continue to require that their members be registered intermediaries, other markets permit a broader class of entities to become **DEA** participants/ market-members, e.g., non-intermediaries. A majority of markets responding to the TCSC2 survey believe that the way they permitted **DEA** does not introduce unmanageable risks.

B. Intermediated Direct Access (automated order routing/sponsored access)

(1) Introduction

Although the use of **DEA** continues to increase, the number of **DEA Customers** appears to be relatively small as a percentage of all Customers.

Intermediaries in five of the ten responding jurisdictions permit **SA**. However even in North America, where the extent of **SA** is greater than in many other jurisdictions, a number of intermediaries indicated that they do not permit such access at all.

In some jurisdictions, "service bureaus" play a significant role in **DEA**. Service bureaus are technology companies that provide order-routing and connectivity services for both intermediaries and institutional Customers. The service bureaus enter into agreements with markets that authorize their electronic connections. In essence, they function as the electronic front end that directs orders to a particular market, and can under some circumstances be viewed as an extension of the technology infrastructure of intermediaries. The use of service bureaus by intermediaries can be seen as an outsourcing of functions that are normally performed internally (possibly including pre-trade controls). Service bureaus may be used in both AOR and **SA**.

(2) Qualifications of Customers

AOR and SA are granted by the intermediary; however, the specific approval of markets may also be required. Where such specific approval is not required, the market and/or market authority generally requires the market-member to ensure that the Customer has, e.g., the appropriate financial resources, familiarity with the rules of the market, and knowledge of the trading system and proficiency in the use of that system. These requirements may differ between AOR and **SA** arrangements. For example, in **SA** arrangements, some markets restrict Customer access to certain types of institutional investors (including portfolio managers and financial institutions).

In general, market-members who are intermediaries have discretion over which of their Customers are given direct market access, provided such Customers meet certain terms and conditions outlined below, which are typically set in written contractual agreements (see V.B.2 below). Intermediaries generally use a vetting process to determine on a case by case basis which of their Customers will be permitted to have **DEA**. A key element of this vetting process is an analysis of the entire risk profile of the potential **DEA Customer**, particularly with regard to sponsored access. The Customer's internal systems of monitoring their own risk are closely reviewed by the intermediary, including whether the Customer has adequate systems and controls to monitor orders and trades on a real-time basis. In addition, intermediaries report that they review closely some or all of the following factors before granting **DEA** to their Customers:

- Familiarity with market rules;
- Degree of financial experience;
- Prior sanctions for improper trading activity;
- Evidence of a proven track record of responsible trading and supervisory oversight;
- Ability to meet appropriate credit and risk guidelines;
- Minimum thresholds for assets under management; and
- Proposed trading strategy and associated volumes.

Extract – IOSCO POLICIES ON DIRECT ELECTRONIC ACCESS – February 2009 (cont.)

Intermediaries in approximately half of the responding jurisdictions grant direct access to markets only for Customers that are financial institutions, such as broker/dealers, asset managers, banks, introducing brokers, or other types of entities that are supervised or regulated as a financial institution within the jurisdiction. But even where an intermediary permits nonfinancial institutions to have **DEA**, it will nonetheless require a certain minimum level of investor sophistication.

Few intermediaries stated that they would permit retail participation.

Some markets permit sub-delegation of a Customer's **DEA** access to another party, i.e., where a **DEA Customer** is permitted to delegate its access privileges directly to another Customer. This is used primarily to accommodate structures of the market-member whose affiliates have **DEA Customers** outside of the jurisdiction. There are rarely any specific market rules to regulate the sub-delegation.

(3) Identification of DEA orders

Markets assign each market-member a mnemonic (identifier or "designated code"); and users must input a username and password to access the market trading system. However, most markets' electronic systems do not identify through the market member's IP address or mnemonic the specific Customers of market-members using AOR or **SA**, i.e., their systems do not support sub-user identifiers or passwords.

C. Direct Access by Non-intermediary Market Members

Markets generally impose two broad types of requirements with regard to non-intermediary market-members . These include (i) qualifications of key individuals such as requisite training or competency and "fit and proper" standards; and (ii) structure, management and resources of the applicant. This latter category generally includes: adequacy of internal controls financial resources, technical systems and operational controls; certification of system requirements; and integrity of order routing systems.

Since such a non-intermediary market-member is generally not eligible to become a clearing member, markets will generally require a contractual arrangement between the non-intermediary member and a clearing member. Some markets are party to the same contractual agreement ("tripartite agreement"). Those contractual agreements set out the respective responsibilities of the parties with regard to, among other things, risk management expectations, position limits and, for some markets, filters.

…

Appendix I

TCSC2 used the following definitions:

"Direct Electronic Access (DEA)" - **DEA** refers to the process by which a person transmits orders on their own (i.e., ***without any handling or re-entry by another person***) directly into the market's trade matching system for execution. *[emphasis added]*

"Participant" – a person that is granted access to the market to transmit orders using **DEA**, whether or not a licensed or registered intermediary.

"Person" - Use of the word "person" is used for convenience and includes individuals, as well as entities such as corporations, limited partnerships etc.

"Sponsored Access" – An electronic access arrangement under which an intermediary Participant permits a Customer to transmit orders through its own system and gateway directly to the trading system or, less commonly, to send orders electronically to the trading system through a service bureau pursuant to an arrangement between the vendor and the intermediary Participant(s).

"Sponsored Access Person" - A Person who contracts with one or more Participants for Sponsored Access to the market.

"Market" - refers to exchanges and alternative trading facilities.

TCSC3 used the following definitions:

"Access through intermediary or third party infrastructure" - An electronic access arrangement under which a Customer of an intermediary (such as a broker or broker-dealer) is able to transmit orders to one or more markets' order matching system for execution through the intermediary's own infrastructure and gateway directly, or to send orders to the market through a service bureau's IT infrastructure, pursuant to an arrangement between the vendor and the intermediary.

"Access without utilization of intermediary infrastructure" - This refers to the process by which a Customer (such as a fund manager) of an intermediary (such as a broker or broker-dealer), transmits orders on their own (i.e., without any handling or re-entry by the intermediary), directly into one or more markets' order matching system for execution. While the Customer may be using the intermediary's "tag" number, or name, the order does not go through the intermediary's infrastructure (including the intermediary's order routing IT systems). Such direct access, without utilization of the intermediary's infrastructure, could be referred to as "back-door" access to the market.

"Customer" – a person that is granted access to the market to transmit orders using either access through an intermediary's infrastructure, or access without utilization of the intermediary's infrastructure, whether or not that person is a licensed or registered intermediary.

"Market" - refers to registered or licensed exchanges.

Extract - DIRECTIVE 2014/65/EU OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 15 May 2014

Extract - DIRECTIVE 2014/65/EU OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 15 May 2014 on markets in financial instruments and amending Directive 2002/92/EC and Directive 2011/61/EU

http://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32014L0065&from=EN

(18) ***Persons administering their own assets and undertakings, who do not provide investment services or perform investment activities other than dealing on own account in financial instruments which are not commodity derivatives, emission allowances or derivatives thereof, should not be covered by the scope of this Directive unless they are market makers, members or participants of a regulated market or an MTF or have direct electronic access to a trading venue, apply a high-frequency algorithmic trading technique, or deal on own account when executing client orders.*** *[emphasis added]*

…

(50) Since the scope of prudential regulation should be limited to those entities which, by virtue of running a trading book on a professional basis, represent a source of a counterparty risk to other market participants, entities which deal on own account in financial instruments other than commodity derivatives, emission allowances or derivatives thereof, should be excluded from the scope of this Directive provided that they are not market makers, do not deal on own account when executing client orders, are not members or participants of a regulated market or MTF, do not have **direct electronic access** to a trading venue and do not apply a high-frequency algorithmic trading technique.

…

(59) The use of trading technology has evolved significantly in the past decade and is now extensively used by market participants. Many market participants now make use of algorithmic trading where a computer algorithm automatically determines aspects of an order with minimal or no human intervention. Risks arising from algorithmic trading should be regulated. However, the use of algorithms in post-trade processing of executed transactions does not constitute algorithmic trading. An investment firm that engages in algorithmic trading pursuing a market making strategy should carry out that market making continuously during a specified proportion of the trading venue's trading hours. Regulatory technical standards should clarify what constitutes specified proportion of the trading venue's trading hours by ensuring that such specified proportion is significant in comparison to the total trading hours, taking into account the liquidity, scale and nature of the specific market and the characteristics of the financial instrument traded.

(60) Investment firms that engage in algorithmic trading pursuing a market making strategy should have in place appropriate systems and controls for that activity. Such an activity should be understood in a way specific to its context and purpose. The definition of such an activity is therefore independent from definitions such as that of 'market making activities' in Regulation (EU) No 236/2012 of the European Parliament and of the Council (2).

(61) A specific subset of algorithmic trading is high-frequency algorithmic trading where a trading system analyses data or signals from the market at high speed and then sends or updates large numbers of orders within a very short time period in response to that analysis. In particular, high-frequency algorithmic trading may contain elements such as order initiation, generating, routing and execution which are determined by the system without human intervention for each individual trade or order, short time-frame for establishing and liquidating positions, high daily portfolio turnover, high order-to-trade ratio intraday and ending the trading day at or close to a flat position. High-frequency algorithmic trading is characterised, among others, by high message intra-day rates which constitute orders, quotes or cancellations. In determining what constitutes high message intra-day rates, the identity of the client ultimately behind the activity, the length of the observation period, the comparison with the overall market activity during that period and the relative concentration or fragmentation of activity should be taken into account. High-frequency algorithmic trading is typically done by the traders using their own capital to trade and rather than being a strategy in itself is usually the use of sophisticated technology to implement more traditional trading strategies such as market making or arbitrage.

(62) Technical advances have enabled high-frequency trading and an evolution of business models. High-frequency trading is facilitated by the co-location of market participants' facilities in close physical proximity to a trading venue's matching engine. In order to ensure orderly and fair trading conditions, it is essential to require trading venues to provide such co-location services on a non-discriminatory, fair and transparent basis. The use of trading technology has increased the speed, capacity and complexity of how investors trade. It has also enabled market participants to facilitate **direct electronic access** by their clients to markets through the use of their trading facilities, through **direct market access** or **sponsored access**. Trading technology has provided benefits to the market and market participants generally such as wider participation in markets, increased liquidity, narrower spreads, reduced short term volatility and the means to obtain better execution of orders for clients. Yet that trading technology also gives rise to a number of potential risks such as an increased risk of the overloading of the systems of trading venues due to large volumes of orders, risks of algorithmic trading generating duplicative or erroneous orders or otherwise malfunctioning in a way that may create a disorderly market.

In addition, there is the risk of algorithmic trading systems overreacting to other market events which can exacerbate volatility if there is a pre-existing market problem. Finally, algorithmic trading or high-frequency algorithmic trading techniques can, like any other form of trading, lend themselves to certain forms of behaviour which is prohibited under Regulation (EU) No 596/2014. High-frequency trading may also, because of the information advantage provided to high-frequency traders, prompt investors to choose to execute trades in venues where they can avoid interaction with high-frequency traders. It is appropriate to subject high-frequency algorithmic trading techniques which rely on certain specified characteristics to particular regulatory scrutiny. While those are predominantly techniques which rely on trading on own account such scrutiny should also apply where the execution of the technique is structured in such a way as to avoid the execution taking place on own account.

Extract - DIRECTIVE 2014/65/EU OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 15 May 2014 (cont.)

(63) Those potential risks from increased use of technology are best mitigated by a combination of measures and specific risk controls directed at firms that engage in algorithmic trading or high-frequency algorithmic trading techniques, those that provide **direct electronic access**, and other measures directed at operators of trading venues that are accessed by such firms. In order to strengthen the resilience of markets in the light of technological developments, those measures should reflect and build on the technical guidelines issued by the European Supervisory Authority (European Securities and Markets Authority) ('ESMA'), established by Regulation (EU) No 1095/2010 of the European Parliament and of the Council (1) in February 2012 on systems and controls in an automated trading environment for trading platforms, investment firms and competent authorities (ESMA/2012/122). It is desirable to ensure that all high-frequency algorithmic trading firms be authorised. Such authorisation should ensure those firms are subject to organisational requirements under this Directive and that they are properly supervised. However, entities which are authorised and supervised under Union law regulating the financial sector and are exempt from this Directive, but which engage in algorithmic trading or high-frequency algorithmic trading techniques, should not be required to obtain an authorisation under this Directive and should only be subject to the measures and controls aiming to tackle the specific risk arising from those types of trading. In that respect, ESMA should play an important coordinating role by defining appropriate tick sizes in order to ensure orderly markets at Union level.

(64) Both investment firms and trading venues should ensure robust measures are in place to ensure that algorithmic trading or high-frequency algorithmic trading techniques do not create a disorderly market and cannot be used for abusive purposes. Trading venues should also ensure their trading systems are resilient and properly tested to deal with increased order flows or market stresses and that circuit breakers are in place on trading venues to temporarily halt trading or constrain it if there are sudden unexpected price movements.

(65) It is also necessary to ensure that the fee structures of trading venues are transparent, non-discriminatory and fair and that they are not structured in such a way as to promote disorderly market conditions. It is therefore appropriate to allow for trading venues to adjust their fees for cancelled orders according to the length of time for which the order was maintained and to calibrate the fees to each financial instrument to which they apply. Member States should also be able to allow trading venues to impose higher fees for placing orders that are subsequently cancelled or on participants placing a high ratio of cancelled orders and on those operating a high- frequency algorithmic trading technique in order to reflect the additional burden on system capacity without necessarily benefitting other market participants.

(66) In addition to measures relating to algorithmic and high-frequency algorithmic trading techniques it is appropriate to ban the provision of **direct electronic access** to markets by investment firms for their clients where such access is not subject to proper systems and controls. Irrespective of the form of the **direct electronic access** provided, firms providing such access should assess and review the suitability of clients using that service and ensure that risk controls are imposed on the use of the service and that those firms retain responsibility for trading submitted by their clients through the use of their systems or using their trading codes. It is appropriate that detailed organisational requirements regarding those new forms of trading should be prescribed in more detail in regulatory technical standards. This should ensure that requirements can be amended where necessary to deal with further innovation and developments in that area.

(67) In order to ensure effective supervision and in order to enable the competent authorities to take appropriate measures against defective or rogue algorithmic strategies in due time it is necessary to flag all orders generated by algorithmic trading. By means of flagging, competent authorities should be enabled to identify and distinguish orders originating from different algorithms and to reconstruct efficiently and evaluate the strategies that algorithmic traders employ. This should mitigate the risk that orders are not unambiguously attributed to an algorithmic strategy and a trader. The flagging permits the competent authorities to react efficiently and effectively against algorithmic trading strategies that behave in an abusive manner or pose risks to the orderly functioning of the market.

(68) In order to ensure that market integrity is maintained in the light of technological developments in financial markets, ESMA should regularly seek input from national experts on developments relating to trading technology including high-frequency trading and new practices which could constitute market abuse, so as to identify and promote effective strategies for preventing and addressing such abuse.

…

(109) ***The provision of services by third country firms in the Union is subject to national regimes and requirements*** *[emphasis added].* Firms authorised in accordance with them do not enjoy the freedom to provide services and the right of establishment in Member States other than the one where they are established. Where a Member State considers that the appropriate level of protection for its retail clients or retail clients who have requested to be treated as professional clients can be achieved by the establishment of a branch by the third-country firm it is appropriate to introduce a minimum common regulatory framework at Union level with respect to the requirements applicable to those branches and in light of the principle that third-country firms should not be treated in a more favourable way than Union firms.

…

Extract - DIRECTIVE 2014/65/EU OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 15 May 2014 (cont., with Article 1 Scope and Article 2 Exemptions)

TITLE I

SCOPE AND DEFINITIONS

Article 1

Scope

1. This Directive shall apply to investment firms, market operators, data reporting services providers, and third-country firms providing investment services or performing investment activities through the establishment of a branch in the Union.

2. This Directive establishes requirements in relation to the following:

(a) authorisation and operating conditions for investment firms;

(b) provision of investment services or activities by third-country firms through the establishment of a branch;

(c) authorisation and operation of regulated markets;

(d) authorisation and operation of data reporting services providers; and

(e) supervision, cooperation and enforcement by competent authorities.

3. The following provisions shall also apply to credit institutions authorised under Directive 2013/36/EU, when providing one or more investment services and/or performing investment activities:

(a) Article 2(2), Article 9(3) and Articles 14 and 16 to 20,

(b) Chapter II of Title II excluding second subparagraph of Article 29(2),

(c) Chapter III of Title II excluding Article 34(2) and (3) and Article 35(2) to (6) and (9),

(d) Articles 67 to 75 and Articles 80, 85 and 86.

4. The following provisions shall also apply to investment firms and to credit institutions authorised under Directive 2013/36/EU when selling or advising clients in relation to structured deposits:

(a) Article 9(3), Article 14, and Article 16(2), (3) and (6);

(b) Articles 23 to 26, Article 28 and Article 29, excluding the second subparagraph of paragraph 2 thereof, and Article 30; and

(c) Articles 67 to 75.

5. Article 17(1) to (6) shall also apply to members or participants of regulated markets and MTFs who are not required to be authorised under this Directive pursuant to points (a), (e), (i) and (j) of Article 2(1).

6. Articles 57 and 58 shall also apply to persons exempt under Article 2.

7. All multilateral systems in financial instruments shall operate either in accordance with the provisions of Title II concerning MTFs or OTFs or the provisions of Title III concerning regulated markets.

Any investment firms which, on an organised, frequent, systematic and substantial basis, deal on own account when executing client orders outside a regulated market, an MTF or an OTF shall operate in accordance with Title III of Regulation (EU) No 600/2014.

Without prejudice to Articles 23 and 28 of Regulation (EU) No 600/2014, all transactions in financial instruments as referred to in the first and the second subparagraphs which are not concluded on multilateral systems or systematic internalisers shall comply with the relevant provisions of Title III of Regulation (EU) No 600/2014.EN 12.6.2014 Official Journal of the European Union L 173/375

Article 2

Exemptions

1. This Directive shall not apply to:

(a) insurance undertakings or undertakings carrying out the reinsurance and retrocession activities referred to in Directive 2009/138/EC when carrying out the activities referred to in that Directive;

(b) persons providing investment services exclusively for their parent undertakings, for their subsidiaries or for other subsidiaries of their parent undertakings;

(c) persons providing an investment service where that service is provided in an incidental manner in the course of a professional activity and that activity is regulated by legal or regulatory provisions or a code of ethics governing the profession which do not exclude the provision of that service;

(d) persons dealing on own account in financial instruments other than commodity derivatives or emission allowances or derivatives thereof and not providing any other investment services or performing any other investment activities in financial instruments other than commodity derivatives or emission allowances or derivatives thereof unless such persons:

(i) are market makers;

(ii) are members of or participants in a regulated market or an MTF ***or have direct electronic access to a trading venue*** *[emphasis added]*;

(iii) apply a high-frequency algorithmic trading technique; or

(iv) deal on own account when executing client orders;

Persons exempt under points (a), (i) or (j) are not required to meet the conditions laid down in this point in order to be exempt.

…

Extract - DIRECTIVE 2014/65/EU OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 15 May 2014 (Article 4 Definitions and Article 17 Algorithmic Trading)

Article 4

Definitions

1. For the purposes of this Directive, the following definitions apply:

(1) 'investment firm' means any legal person whose regular occupation or business is the provision of one or more investment services to third parties and/or the performance of one or more investment activities on a professional basis.

…

(39) 'algorithmic trading' means trading in financial instruments where a computer algorithm **automatically determines individual parameters of orders *such as* whether to initiate the order, the timing, price or quantity of the order *or* how to manage the order after its submission** *[emphasis added]*, with limited or no human intervention, and does not include any system that is only used for the purpose of routing orders to one or more trading venues or for the processing of orders involving no determination of any trading parameters or for the confirmation of orders or the post-trade processing of executed transactions;

(40) 'high-frequency algorithmic trading technique' means an algorithmic trading technique characterised by:

(a) infrastructure intended to minimise network and other types of latencies, including at least one of the following facilities for algorithmic order entry: co-location, proximity hosting or high-speed **direct electronic access**;

(b) system-determination of order initiation, generation, routing or execution without human intervention for individual trades or orders; and

(c) high message intraday rates which constitute orders, quotes or cancellations;

(41) '**direct electronic access**' means an arrangement where a member or participant or client of a trading venue permits a person to use its trading code so the person can electronically transmit orders relating to a financial instrument directly to the trading venue and includes arrangements which involve the use by a person of the infrastructure of the member or participant or client, or any connecting system provided by the member or participant or client, to transmit the orders (**direct market access**) and arrangements where such an infrastructure is not used by a person (**sponsored access**);

…

(57) 'third-country firm' means a firm that would be a credit institution providing investment services or performing investment activities or an investment firm if its head office or registered office were located within the Union;

…

Article 17

Algorithmic trading

1. An investment firm that engages in algorithmic trading shall have in place effective systems and risk controls suitable to the business it operates to ensure that its trading systems are resilient and have sufficient capacity, are subject to appropriate trading thresholds and limits and prevent the sending of erroneous orders or the systems otherwise functioning in a way that may create or contribute to a disorderly market. Such a firm shall also have in place effective systems and risk controls to ensure the trading systems cannot be used for any purpose that is contrary to Regulation (EU) No 596/2014 or to the rules of a trading venue to which it is connected. The investment firm shall have in place effective business continuity arrangements to deal with any failure of its trading systems and shall ensure its systems are fully tested and properly monitored to ensure that they meet the requirements laid down in this paragraph.

2. An investment firm that engages in algorithmic trading in a Member State shall notify this to the competent authorities of its home Member State and of the trading venue at which the investment firm engages in algorithmic trading as a member or participant of the trading venue.

The competent authority of the home Member State of the investment firm may require the investment firm to provide, on a regular or ad-hoc basis, a description of the nature of its algorithmic trading strategies, details of the trading parameters or limits to which the system is subject, the key compliance and risk controls that it has in place to ensure the conditions laid down in paragraph 1 are satisfied and details of the testing of its systems. The competent authority of the home Member State of the investment firm may, at any time, request further information from an investment firm about its algorithmic trading and the systems used for that trading.

The competent authority of the home Member State of the investment firm shall, on the request of a competent authority of a trading venue at which the investment firm as a member or participant of the trading venue is engaged in algorithmic trading and without undue delay, communicate the information referred to in the second subparagraph that it receives from the investment firm that engages in algorithmic trading.

The investment firm shall arrange for records to be kept in relation to the matters referred to in this paragraph and shall ensure that those records be sufficient to enable its competent authority to monitor compliance with the requirements of this Directive.

An investment firm that engages in a high-frequency algorithmic trading technique shall store in an approved form accurate and time sequenced records of all its placed orders, including cancellations of orders, executed orders and quotations on trading venues and shall make them available to the competent authority upon request.

Extract - DIRECTIVE 2014/65/EU OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 15 May 2014 (Article 17 Algorithmic Trading cont.)

3. An investment firm that engages in algorithmic trading to pursue a market making strategy shall, taking into account the liquidity, scale and nature of the specific market and the characteristics of the instrument traded:

(a) carry out this market making continuously during a specified proportion of the trading venue's trading hours, except under exceptional circumstances, with the result of providing liquidity on a regular and predictable basis to the trading venue;

(b) enter into a binding written agreement with the trading venue which shall at least specify the obligations of the investment firm in accordance with point (a); and

(c) have in place effective systems and controls to ensure that it fulfils its obligations under the agreement referred to in point (b) at all times.

4. For the purposes of this Article and of Article 48 of this Directive, an investment firm that engages in algorithmic trading shall be considered to be pursuing a market making strategy when, as a member or participant of one or more trading venues, its strategy, when dealing on own account, involves posting firm, simultaneous two-way quotes of comparable size and at competitive prices relating to one or more financial instruments on a single trading venue or across different trading venues, with the result of providing liquidity on a regular and frequent basis to the overall market.

5. An investment firm that provides **direct electronic access** to a trading venue shall have in place effective systems and controls which ensure a proper assessment and review of the suitability of clients using the service, that clients using the service are prevented from exceeding appropriate pre-set trading and credit thresholds, that trading by clients using the service is properly monitored and that appropriate risk controls prevent trading that may create risks to the investment firm itself or that could create or contribute to a disorderly market or could be contrary to Regulation (EU) No 596/2014 or the rules of the trading venue. **Direct electronic access** without such controls is prohibited.

An investment firm that provides **direct electronic access** shall be responsible for ensuring that clients using that service comply with the requirements of this Directive and the rules of the trading venue. The investment firm shall monitor the transactions in order to identify infringements of those rules, disorderly trading conditions or conduct that may involve market abuse and that is to be reported to the competent authority. The investment firm shall ensure that there is a binding written agreement between the investment firm and the client regarding the essential rights and obligations arising from the provision of the service and that under the agreement the investment firm retains responsibility under this Directive.

An investment firm that provides **direct electronic access** to a trading venue shall notify the competent authorities of its home Member State and of the trading venue at which the investment firm provides **direct electronic access** accordingly.

The competent authority of the home Member State of the investment firm may require the investment firm to provide, on a regular or ad-hoc basis, a description of the systems and controls referred to in first subparagraph and evidence that those have been applied.

The competent authority of the home Member State of the investment firm shall, on the request of a competent authority of a trading venue in relation to which the investment firm provides **direct electronic access**, communicate without undue delay the information referred to in the fourth subparagraph that it receives from the investment firm.

The investment firm shall arrange for records to be kept in relation to the matters referred to in this paragraph and shall ensure that those records be sufficient to enable its competent authority to monitor compliance with the requirements of this Directive.

6. An investment firm that acts as a general clearing member for other persons shall have in place effective systems and controls to ensure clearing services are only applied to persons who are suitable and meet clear criteria and that appropriate requirements are imposed on those persons to reduce risks to the investment firm and to the market. The investment firm shall ensure that there is a binding written agreement between the investment firm and the person regarding the essential rights and obligations arising from the provision of that service.

7. ESMA shall develop draft regulatory technical standards to specify the following:

(a) the details of organisational requirements laid down in paragraphs 1 to 6 to be imposed on investment firms providing different investment services and/or activities and ancillary services or combinations thereof, whereby the specifications in relation to the organisational requirements laid down in paragraph 5 shall set out specific requirements for **direct market access** and for **sponsored access** in such a way as to ensure that the controls applied to **sponsored access** are at least equivalent to those applied to **direct market access**;

(b) the circumstances in which an investment firm would be obliged to enter into the market making agreement referred to in point (b) of paragraph 3 and the content of such agreements, including the proportion of the trading venue's trading hours laid down in paragraph 3;

(c) the situations constituting exceptional circumstances referred to in paragraph 3, including circumstances of extreme volatility, political and macroeconomic issues, system and operational matters, and circumstances which contradict the investment firm's ability to maintain prudent risk management practices as laid down in paragraph 1;

(d) the content and format of the approved form referred to in the fifth subparagraph of paragraph 2 and the length of time for which such records must be kept by the investment firm.

ESMA shall submit those draft regulatory technical standards to the Commission by 3 July 2015.

Power is delegated to the Commission to adopt the regulatory technical standards referred to in the first subparagraph in accordance with Articles 10 to 14 of Regulation (EU) No 1095/2010.EN L 173/400 Official Journal of the European Union 12.6.2014.

Extract - DIRECTIVE 2014/65/EU OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 15 May 2014 (Article 48 Systems resilience, circuit breakers and electronic trading)

Article 48

Systems resilience, circuit breakers and electronic trading

1. Member States shall require a regulated market to have in place effective systems, procedures and arrangements to ensure its trading systems are resilient, have sufficient capacity to deal with peak order and message volumes, are able to ensure orderly trading under conditions of severe market stress, are fully tested to ensure such conditions are met and are subject to effective business continuity arrangements to ensure continuity of its services if there is any failure of its trading systems.

…

6. Member States shall require a regulated market to have in place effective systems, procedures and arrangements, including requiring members or participants to carry out appropriate testing of algorithms and providing environments to facilitate such testing, to ensure that algorithmic trading systems cannot create or contribute to disorderly trading conditions on the market and to manage any disorderly trading conditions which do arise from such algorithmic trading systems, including systems to limit the ratio of unexecuted orders to transactions that may be entered into the system by a member or participant, to be able to slow down the flow of orders if there is a risk of its system capacity being reached and to limit and enforce the minimum tick size that may be executed on the market.

7. Member States shall require a regulated market that permits **direct electronic access** to have in place effective systems procedures and arrangements to ensure that members or participants are only permitted to provide such services if they are investment firms authorised under this Directive or credit institutions authorised under Directive 2013/36/EU, that appropriate criteria are set and applied regarding the suitability of persons to whom such access may be provided and that the member or participant retains responsibility for orders and trades executed using that service in relation to the requirements of this Directive.
Member States shall also require that the regulated market set appropriate standards regarding risk controls and thresholds on trading through such access and is able to distinguish and if necessary to stop orders or trading by a person using **direct electronic access** separately from other orders or trading by the member or participant.
The regulated market shall have arrangements in place to suspend or terminate the provision of **direct electronic access** by a member or participant to a client in the case of non-compliance with this paragraph.
…

CHAPTER IV

Provision of investment services and activities by third country firms

Article 39

Establishment of a branch

1. A Member State may require that a third-country firm intending to provide investment services or perform investment activities with or without any ancillary services to retail clients or to professional clients within the meaning of Section II of Annex II in its territory establish a branch in that Member State.

2. Where a Member State requires that a third-country firm intending to provide investment services or to perform investment activities with or without any ancillary services in its territory establish a branch, the branch shall acquire a prior authorisation by the competent authorities of that Member State in accordance with the following conditions:

(a) the provision of services for which the third-country firm requests authorisation is subject to authorisation and supervision in the third country where the firm is established and the requesting firm is properly authorised, whereby the competent authority pays due regard to any FATF recommendations in the context of anti-money laundering and countering the financing of terrorism;

(b) cooperation arrangements, that include provisions regulating the exchange of information for the purpose of preserving the integrity of the market and protecting investors, are in place between the competent authorities in the Member State where the branch is to be established and competent supervisory authorities of the third country where the firm is established;

(c) sufficient initial capital is at free disposal of the branch;

(d) one or more persons are appointed to be responsible for the management of the branch and they all comply with the requirement laid down in Article 9(1);

(e) the third country where the third-country firm is established has signed an agreement with the Member State where the branch is to be established, which fully comply with the standards laid down in Article 26 of the OECD Model Tax Convention on Income and on Capital and ensures an effective exchange of information in tax matters, including, if any, multilateral tax agreements; (

f) the firm belongs to an investor-compensation scheme authorised or recognised in accordance with Directive 97/9/EC. 3. The third-country firm referred to in paragraph 1 shall submit its application to the competent authority of the Member State where it intends to establish a branch.

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Extract – Consultation Paper ESMA/2014/549, 22 May 2014 (Algorithmic Trading)

Extract – Consultation Paper ESMA/2014/549 of 22 May 2014

https://www.esma.europa.eu/sites/default/files/library/2015/11/2014-549_-_consultation_paper_mifid_ii_-_mifir.pdf

5. Micro-structural issues
5.1. Algorithmic and high frequency trading (HFT)
Background/Mandate
Extract from the Commission's request for advice (mandate)
*ESMA is invited to provide technical advice to further specify on the definition of what should be considered **algorithmic trading** as opposed to high frequency algorithmic trading technique to ensure a uniform application of the authorization requirement for persons that engage in high frequency algorithmic trading technique taking into account the need to capture all genuine high frequency traders.*

1. The concepts of "algorithmic trading" and "high frequency algorithmic trading technique" are defined under Articles 4(1)(39) and (40) of MiFID II. It is important to distinguish clearly between these two concepts to ensure the uniform application of the authorisation requirement.

2. Recital 63 explains that it is desirable to ensure that all high frequency algorithmic trading firms be authorised to ensure they are subject to organisational requirements under the Directive and are properly supervised. Therefore, any further specification of the definition of "high frequency algorithmic trading technique" should be sufficiently broad to ensure that all genuine HFT traders will be caught and dynamic enough to cope with market and technological developments.

Analysis

3. Carving HFT out of algorithmic trading is complex. In practice, HFT is frequently equated to algorithmic trading but it is in fact a sub-set of algorithmic trading.

4. HFT is a special class of algorithmic trading in which computers make decisions to initiate orders based on information that is received electronically, before human traders are capable of processing the information they observe and of taking a decision in relation thereto. HFT specifically monitors the market for patterns that indicate trading opportunities; then places orders to take instant advantage of those opportunities. HFT systems place automated, (usually) small scale, probabilistic bets (e.g. puts orders on both directions, buy and sell).

5. Using HFT entails two main types of regulatory consequences under MiFID II: firstly, persons dealing on their own account using a high-frequency algorithmic trading technique fall under the scope of MiFID II and have to be authorised as investment firms, as prescribed by Article 2(1)(d)(iii) of MiFID II. Additionally, Article 17(2) of MiFID II last paragraph determines that an investment firm that engages in a high-frequency trading technique shall store in an approved form accurate and time sequenced records of all its placed orders, including cancellations of orders, executed orders and quotations on trading venues and shall make them available to the NCA upon request.

6. ESMA is considering two different approaches as regards the clarification of the HFT definition: option 1 and option 2 described below.

7. Under **Option 1**, it would be necessary to meet the following requirements regarding the infrastructure designed to minimise latency and the capacity to transfer data to the venue:

i. the distance between the trading venue's matching engine and the server used by the investment firm on which the algorithms run; on that basis, the use of infrastructure designed to reduce latency would be presumed if the server on which the order messages are initiated, generated, routed, executed, amended or cancelled is directly proximate to the trading venue's matching engine; and

ii. the volume of data capable of being transferred through the connection per second (bandwidth). Most markets offer higher bandwidths for latency-sensitive traders, because such enable them to achieve faster messaging or executions. On the basis of the information currently available, a bandwidth in the range of 10 GBit/s would be considered among the fastest currently provided, and that maximum capacity would only be achieved in connection with co-location arrangements. However, ESMA is conscious of the fact that a high bandwidth is subject to technological change and therefore should rather be covered in a qualitative manner; and

iii. a trading frequency of 2 messages per second over the entire trading day should be considered as being generated by a machine/algorithm. On that basis, to determine the number of messages per trading day, it would be necessary to multiply the amount of seconds available per trading day (which may vary from market to market) by 2. The message volume should be determined on a rolling basis per trading day based on the previous 12-month period.

8. If this approach was followed, a significant volume of intra-day messages would be in the range of 75,000 messages or more per trading day on average over the year. The threshold should be calculated per trading venue according to the ISO 10383 Market Identifier Code. There have been made tests for 60,000 and 100,000 messages per trading day as well. The results have shown that the threshold of 75,000 messages per trading day seems fair according to the number of members defined as High-Frequency Traders using a direct approach.

9. The sum of messages would be calculated for each trading day and the moving average thereof should be calculated on a daily basis using the last 250 trading days. Days where a particular member/trader did not send messages at all are considered as having zero messages if the respective venue was open for trading on that particular day.

10. The message rate should not be calculated for participants who return the membership of a trading venue, as long as they do not continue trading on that venue as indirect participants.

11. Since the threshold would be based on the volume of messages per trading day on average over the year, no exemption for periods of volatility seems necessary. This threshold would have to be regularly back tested and possibly adjusted, because of different volatility situations over time.

12. ESMA considers that the references to 'messages' above should be interpreted strictly, i.e. considering as one message each content that needs independent processing. On that basis, the messages to be counted for these purposes are each new order or quote, each successful change to an order or quote and each successful deletion of an order or quote. In cases of bulk transactions, every single message is to be counted separately.

13. For example, for an unexecuted "immediate-or-cancel" order, two messages should be counted: the order sent for immediate execution and also the cancellation order as the previous has not been totally fulfilled. A quote should also be counted as two messages: bid and ask. Messages originating from a

Extract – Consultation Paper ESMA/2014/549, 22 May 2014 (HFT)

13. For example, for an unexecuted "immediate-or-cancel" order, two messages should be counted: the order sent for immediate execution and also the cancellation order as the previous has not been totally fulfilled. A quote should also be counted as two messages: bid and ask. Messages originating from a technical process where the trader was not able to influence their existence, e.g. messages resulting from a transaction are not counted as messages.
14. ESMA considers that the main advantage of this approach is that the identification of the parameters is straightforward.
15. On the other hand, it can be argued as well that the parameters are relatively easy to circumvent, that it would be necessary to review whether the parameters are in line with market practice, and some types of HFT might not be covered (in particular those which benefit from proximity hosting).
16. Under **Option 2**, each trading venue should periodically analyse the median daily lifetime of their orders which have been modified or cancelled and determine in which cases the median daily lifetime of the orders modified or cancelled by its members/participants fall below the median daily lifetime of orders modified or cancelled for the entire market (which means that these members/participants become HFT). 'Daily' means that orders with a lifetime longer than one day should not be considered for these purposes.
17. ESMA's preliminary view is that the determination of the median daily lifetime of the orders submitted to the trading venue *by all members/participants* should only be made for liquid instruments, in which HFT is more frequent. Therefore, it is proposed that only orders regarding instruments considered as liquid following Article 2(1)(17) MiFIR should be considered for these purposes.
18. In order to calculate the median daily lifetime of the orders submitted *by each member/participant* it would be possible to consider either only those orders submitted for liquid instruments or all orders submitted to the trading venue (i.e. liquid and illiquid instruments, which might simplify the calculations because it would not be necessary to disentangle the activity of a member/participant relating to liquid instruments). ESMA welcomes the views of market participants in this regard.
19. Given that members or participants of trading venues may submit orders under the same ID but using different strategies (which may be HFT or not), the main advantage of using the median daily lifetime of orders being modified or cancelled against other parameters (such as the mean) is that it permits focusing on a consistent behaviour across a certain timeframe avoiding a potential bias due to extremely quick or slow orders.
20. ESMA's preliminary view is that being considered as HFT in one market should determine being considered as such for all trading venues in the EU.
21. ESMA considers that some of the main advantages under Option 2 are: it relates to a calculation that trading venues regularly undertake nowadays; that by definition, this method cannot be easily circumvented; and, finally that it does not need to be revised frequently so as to keep pace with the latest technological developments.
22. This calculation system has to be read in conjunction with the MiFID II provisions, i.e. there has to be infrastructure to minimise latency (co-location, proximity hosting or high speed DEA) and system determination of order initiation, generation, routing or execution. Therefore, under this proposal, a trading venue that does not meet the Level 1 conditions would not be covered by either of the two options.

Draft technical advice

1. **High frequency algorithmic trading technique**: ESMA is considering two different approaches as regards the clarification of the HFT definition:

2. **Option 1**: ESMA would consider that *all the following requirements* should be met:

   i. There is an "*infrastructure intended to minimise network and other types of latencies*" in place when:

      a. the server on which the algorithms initiate, generate, route, submit, execute, amend or delete messages is directly proximate to the trading venue's matching engine; and

      b. a high bandwidth is used compared to the standard access offered by the respective trading venue; and

   ii. The participant/member has a "*high message intraday rates*" when at least 2 messages per second are submitted to the trading venue over the trading day.

3. **Option 2**: establishing as a proxy to assess the *"high frequency nature of the message intraday rate"* the daily lifetime of orders (having been modified or cancelled), and thereafter considering that when the median daily lifetime of the orders (having been modified or cancelled) of one member/participant is shorter than the median daily lifetime of the orders (having been modified or cancelled) in a given trading venue, that member/participant should be considered as HFT.

Only instruments considered as liquid following Article 2(1)(17) of MiFIR should be considered for these purposes.

Q167. Which would be your preferred option? Why?

Q168. Can you identify any other advantages or disadvantages of the options put forward?

Q169. How would you reduce the impact of the disadvantages identified in your preferred option?

Q170. If you prefer Option 2, please advise ESMA whether for the calculation of the median daily lifetime of the orders of the member/participant, you would take into account only the orders sent for liquid instruments or all the activity in the trading venue.

23. Regardless of the option followed, ESMA considers that the identification of a high frequency trading technique has to be made at the member or participant level.

24. Given that the same member/participant may have several trading desks, each one with their own trading IDs for the venue where they trade and that, those trading desks may operate in several venues at the same time but with different IDs, the only feasible option is to consider that once one of those trading IDs has been identified as performing a high frequency trading technique, the member/participant as an entity should be considered as such and, as a result, it will be considered as
HFT.

Extract – Consultation Paper ESMA/2014/549, 22 May 2014 (DEA)

Extract – Consultation Paper ESMA/2014/549 of 22 May 2014

https://www.esma.europa.eu/sites/default/files/library/2015/11/2014-549_-_consultation_paper_mifid_ii_-_mifir.pdf

5.2. Direct electronic access (DEA)

Background/Mandate

Extract from the Commission's request for advice (mandate)

ESMA is invited to provide technical advice to further specify the definition of ***Direct Electronic Access*** *(****DEA****) to ensure a uniform application and encompasses all types of arrangements that meet this definition.*

1. Article 4(1)(41) of MiFID II defines '**Direct Electronic Access**' (**DEA**) as an "arrangement where a member or participant or client of a trading venue permits a person to use its trading code so the person can electronically transmit orders relating to a financial instrument directly to the trading venue". This definition includes arrangements which involve the use by the person of the infrastructure of the member or participant or client, or any connecting system provided by the member or participant or client, to transmit the orders (**direct market access** (**DMA**)) and arrangements where this infrastructure is not used by that person (**sponsored access** (**SA**)).

Analysis

2. Given that the means to access a market are very diverse in the Member States, there is a need to further clarify this definition in order to ensure it is applied in a uniform way and encompasses all types of arrangements that meet this definition.

3. IOSCO's Principles for Direct Electronic Access to Markets consider Automated Order Routing (AOR) systems to be within the DEA concept. AOR is defined as "an arrangement where an intermediary, who is a market-member, permits its customers to transmit orders electronically to the intermediary's infrastructure (i.e. system architecture, which may include technical systems and/or connecting systems), where the order is in turn automatically transmitted for execution to a market under the intermediary's market-member ID (mnemonic)". *[emphasis added]*

4. ESMA acknowledges that certain jurisdictions consider AOR as formally different from DEA, however, in ESMA's view the definition of AOR arrangements as described above and MiFID's definition of DEA overlap. Given that AOR arrangements and DEA might pose the same risks to the markets ESMA requests the views of market participants on whether it would be appropriate to consider AOR as falling within the DEA definition. *[emphasis added]*

5. Additionally, ESMA requests the views of market participants about how to further clarify the definition of **DEA** (and as a consequence, those of **DMA** and **SA**) to capture all types of arrangements that might meet this definition.

Q172. Do you consider it necessary to clarify the definitions of DEA, DMA and SA provided in MiFID? In what area would further clarification be required and how would you clarify that?

Q173. Is there any other activity that should be covered by the term "DEA", other than DMA and SA? In particular, should AOR be considered within the DEA definition?

6. ESMA notes the proliferation of electronic order transmission systems provided to investors which have become more sophisticated over time. These systems permit clients to transmit orders to investment firms through those firms' web-based interfaces. As such, this is just a type of order execution on behalf of the clients (i.e. intermediation), as appears in Annex I Section A of MiFID.

7. For these purposes the clients use a web based application, rather than individual direct connectivity with separate access.

8. On that basis, ESMA considers that such systems fall outside of the scope of the definition of **DEA**. This preliminary view corresponds with the IOSCO Consultation Report entitled 'Policies on Direct Electronic Access' (February 2009) which does not consider "trading models of a customer calling the intermediary or sending an internet order to the intermediary" as **DEA** because, as long as the customer's trading is intermediated, it is not 'direct access'.

9. However, given the improvement of technological capacities experienced in the last few years, ESMA is interested to know the views of market participants on whether it may be possible to use these interfaces to perform algorithmic or high frequency trading strategies.

Draft technical advice

1. In principle, ESMA considers systems that allow clients transmitting orders to an investment firm in an electronic format to be outside of the scope of **DEA**, as long as the electronic access to the market is shared with other clients through a common connectivity channel, no specific capacity and latency is provided to any particular client (e.g. web based applications).
2. ESMA requests the views of market participants about the potential for these electronic transmission systems to permit algorithmic trading techniques (i.e. automatic onward transmission under the investment firm's trading ID to a specified trading venue) through them.

Q174. Do you consider that electronic order transmission systems through shared connectivity arrangements should be included within the scope of DEA?

Q175. Are you aware of any order transmission systems through shared arrangements which would provide an equivalent type of access as the one provided by DEA arrangements by a member or participant to a client in the case of non-compliance with this paragraph.

…

Extract – Final Report, ESMA Technical Advice, 19 Dec 2014 (Algorithms)

Extract – Final Report, ESMA Technical Advice 2014-1569

https://www.esma.europa.eu/sites/default/files/library/2015/11/2014-1569_final_report_-_esmas_technical_advice_to_the_commission_on_mifid_ii_and_mifir.pdf

5. Micro-structural issues

5.1. Algorithmic and high frequency trading (HFT)

Background/Mandate

Extract from the Commission's request for technical advice (mandate)

*ESMA is invited to provide technical advice to further specify on the definition of what should be considered **algorithmic trading** as opposed to high frequency algorithmic trading technique to ensure a uniform application of the authorization requirement for persons that engage in high frequency algorithmic trading technique taking into account the need to capture all genuine high frequency traders.*

1. The concepts of "**algorithmic trading**" and "high frequency algorithmic trading technique", as they appear in the Commission's mandate, are defined under Articles 4(1)(39) and (40) of MiFID II:

i. Article 4(1)(39) of MiFID II defines **algorithmic trading** as "trading in financial instruments where a computer algorithm automatically determines individual parameters of orders such as whether to initiate the order, the timing, price or quantity of the order or how to manage the order after its submission, with limited or no human intervention, and does not include any system that is only used for the purpose of routing orders to one or more trading venues or for the processing of orders involving no determination of any trading parameters or for the confirmation of orders or the post-trade processing of executed transactions";

ii. Similarly, Article 4(1)(40) of MiFID II defines high frequency algorithmic trading technique as "an algorithmic trading technique characterised by:

(a) infrastructure intended to minimise network and other types of latencies, including at least one of the following facilities for algorithmic order entry: co-location, proximity hosting or high-speed direct electronic access;

(b) system-determination of order initiation, generation, routing or execution without human intervention for individual trades or orders; and

(c) high message intraday rates which constitute orders, quotes or cancellations".

2. Recital 61 states that high frequency trading (HFT) is a specific subset of algorithmic trading. Pursuant to Article 2(1)(d)(iii) of MiFID II any person that applies a high frequency algorithmic trading technique is required to be authorised as an investment firm. Therefore it is necessary to distinguish between these two concepts to ensure the uniform application of the authorisation requirement. Recital 63 further explains that it is desirable to ensure that all high frequency algorithmic trading firms be authorised to ensure they are subject to organisational requirements under the Directive and are properly supervised. Therefore any further specification of the definition of "high frequency algorithmic trading technique" should be sufficiently broad to ensure that all genuine high frequency (HF) traders will be caught and dynamic enough to cope with market and technological developments.

3. Apart from what is described in the Commission's mandate, it is relevant to note that using HFT techniques also entails other type of regulatory consequences under MiFID II. The last paragraph of Article 17(2) of MiFID II requires an investment firm that engages in a HFT technique to store, in an approved form, accurate and time sequenced records of all its placed orders, including cancellations of orders, executed orders and quotations on trading venues and to make them available to the NCA upon request.

…

***Algorithmic trading**: further specification of the definition*

19. When revising its proposals for the identification of HFT, a number of additional trading parameters were proposed by market participants:

i. Some respondents distinguished two types of processes that should be considered separately for the concept of "**algorithmic trading**" and HFT: automated trading decisions and optimisation of order-execution processes. These respondents noted that high frequency trading differs from algorithmic trading in that both processes are fully automated and synchronous;

ii. Adding a high order-to-trade ratio;

iii. Majority of aggressive orders; iv. Turning inventory over frequently every day without holding a significant inventory at the end of the day; v. Using advance technologies to manage latency such as GPUs and FPGAs or advanced coding techniques to avoid non-usable information in Java or C+.

20. ESMA agrees that there are two types of processes that should be considered separately for the clarification of "algorithmic trading" and HFT: **automated trading decisions and optimisation of order-execution processes**. In this respect, ESMA notes that:

i. **Algorithmic trading** refers not only to the generation of orders but also to the optimisation of order-execution processes by automated means once the buy-and-sell decisions have been made by automated means or not. Therefore, **algorithmic trading** may still take place when the trading decision has been made by a person. This is consistent with the wording of Article 4(1)(39) of MiFID II whereby a computer algorithm automatically determines "individual parameters of orders", i.e. also once the investment decision has been made;

ii. There is limited or no human intervention (and therefore **algorithmic trading**) when the ***system at least makes independent decisions at any stage of order-execution processes, either on initiating, routing or executing orders***. [*emphasis added*] It is noted that the reference to "orders" encompasses "quotes" as well.

iii. iii. In particular in the case of HFT, both processes (trading decisions and optimisation of order-execution) are fully automated and synchronous, as highlighted by some respondents to the consultation. This is consistent with the wording of Article 4(1)(40) of MiFID II where it indicates that HFT encompasses "system-determination of order initiation, generation, routing or execution without human intervention for individual trades or orders";

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21. The use of algorithms which only serve to draw the trader's attention to a particular situation is not considered as algorithmic trading. ***Thus, for example, the use of chart software which is programmed to chime or deliver a pop-up message whenever the price of a certain trading instrument intersects with the rolling average, without then automatically making a decision on issuing, amending or cancelling orders, is not seen as algorithmic trading.*** [*emphasis added*]

22. Reference was made to the use of smart order routers in the responses to the consultation. In this respect, ESMA considers necessary to clarify the different scope of the concepts of Automated Order Routing and Smart Order Routing and specify whether they should be considered within the concept of "**algorithmic trading**".

23. Automated Order Routers (AOR) encompass those functionalities that determine the trading venue/s where the order should be submitted without changing any other trading parameter of the order. These functionalities often use algorithms and could thus be considered as algorithmic trading. However, Article 4(1)(39) of MiFID II explicitly excludes them from the definition of algorithmic trading if they only decide about the venue to which the orders should be routed. AORs defined as such are out of the scope of "**algorithmic trading**".

24. Smart Order Routers (SORs) are algorithms used for optimisation of order execution processes that may also determine additional parameters of the order other than determining the venue/s where the order should be submitted. In particular, SORs are able to slice the original order into "child orders" or determine the time of submission of the order or the "child orders". Examples of SORs would be trigger-contingent or delayed start time for an order; a trailing stop-loss order; orders contingent upon entry based on other instrument data and iceberg functionalities. SORs fall within the definition of "**algorithmic trading**" and the relevant MiFID II articles should apply to them.

…

Technical advice

1. ESMA recommends the European Commission to adopt the following clarifications with regard to the definition of algorithmic trading:

i. "where a computer algorithm automatically determines individual parameters of orders such as whether to initiate the order, the timing, the price or quantity of the order or how to manage the order after its submission" means that automated trading decisions and the optimisation of order execution processes by automated means are included in the definition of **algorithmic trading**;

ii. "with limited or no human intervention" means that arrangements are considered as algorithmic trading if the system makes independent decisions at any stage of the processes on either initiating, generating, routing or executing orders. It is noted that the reference to "orders" encompasses "quotes" as well.

iii. "does not include any system that is only used for the purpose of routing orders to one or more trading venues or for the processing of orders involving no determination of any trading parameters" excludes automated order routers that only determine the venue(s) where the order should be submitted without changing any other parameters of the order.

2. ESMA advises the European Commission to follow one of the three options described below as proxies for the identification of "high message intra-day rates":

i. Absolute threshold per instrument: a participant/member would be deemed to have a "high message intraday rate" when the average number of messages sent per trading day to any single liquid instrument traded on a venue is above 2 messages per second.

ii. Absolute threshold per trading venue and per instrument: a participant/member submitting on average at least 4 messages per second with respect to all instruments across a venue or 2 messages per second traded with respect to any single instrument traded on a venue would be deemed to have a "high message intraday rate".

iii. Relative threshold: a member or participant in a trading venue would be deemed to have a "high message intraday rate" where the median daily lifetime of its modified or cancelled orders falls under a threshold below the median daily lifetime of all the modified or cancelled orders submitted to a given trading venue. If the Commission decides to follow this approach, ESMA recommends setting that threshold between the 40th and the 20th percentiles of the daily lifetime of modified or cancelled orders from all members or participants on a trading venue.

3. Whichever option the European Commission adopts, it would be necessary to meet the requirements described in Article 4(1)(40) of MiFID II in terms of infrastructure intended to minimise network and other types of latencies.

4. In case any of the options described is preferred by the Commission, ESMA also recommends that:

i. at least in a first phase (considering as such until the assessment of the report foreseen in Article 90(1)(c) of MiFID II), the identification of HFTs is focused on liquid instruments;

ii. the calculations are made:

   a. For the absolute approach, on a rolling basis by the trading venue considering the preceding 12-months; or,

   b. For the relative approach, on an annual basis by the trading venues at the same time as the annual transparency calculations.

iii. firms pursuing market making strategies, as described by Article 17(4) of MiFID II, are considered in the calculations.

5. For the identification of high frequency trading, ESMA is of the view that only proprietary order flow should be considered. Regardless of the approach followed by the Commission to identify high frequency trading, it is proposed that if an investment firm is classified as HFT, the firm may challenge this classification if they believe this is a direct result of their non-proprietary messaging flow. To that end, investment firms should analyse the records under Article 25 of MiFIR to determine the level of messaging activity which is attributable to the proprietary activities of the investment firm, and the level which is attributable to the clients of the investment firm and provide this summary to the relevant competent authority who would determine whether the firm has been incorrectly identified as exhibiting a "high intra-day message rate".

Extract – Final Report, ESMA Technical Advice, 19 Dec 2014 (DEA)

Extract – Final Report, ESMA Technical Advice 2014-1569

https://www.esma.europa.eu/sites/default/files/library/2015/11/2014-1569_final_report_-_esmas_technical_advice_to_the_commission_on_mifid_ii_and_mifir.pdf

5.2. Direct electronic access (DEA)

Background/Mandate

Extract from the Commission's request for technical advice (mandate)

*ESMA is invited to provide technical advice to further specify the definition of **Direct Electronic Access (DEA)** to ensure a uniform application and encompasses all types of arrangements that meet this definition.*

Article 4(1)(41), MiFID II

*'**direct electronic access**' means an arrangement where a member or participant or client of a trading venue permits a person to use its trading code so the person can electronically transmit orders relating to a financial instrument directly to the trading venue and includes arrangements which involve the use by a person of the infrastructure of the member or participant or client, or any connecting system provided by the member or participant or client, to transmit the orders (**direct market access** [**DMA**]) and arrangements where such an infrastructure is not used by a person (**sponsored access** [**SA**]).*

Analysis following feedback from stakeholders

Direct Electronic Access (DEA) and Automated Order Routers (AORs)

1. ESMA requested the views of market participants about how to further clarify the definition of **DEA** (and as a consequence, those of **DMA** and **SA**) to capture all types of arrangements that might meet this definition.

2. ESMA received 52 answers on the question on whether other activities should be covered by the term "**DEA**". There was wide disparity in the responses received, with the following as the main underlying topics:

i. No identification of additional services that should be considered within the scope of the **DEA** definition;

ii. **Need for a clear differentiation between the activities of automated order routing (AOR), smart order routing (SOR) and DEA.** *[emphasis added]*

iii. A significant number of respondents requested narrowing down the definition of **DEA** on the basis of the activity of the **DEA** user, not on the basis of the type of access to the market or the service provided when granting direct access to a trading venue. For these respondents the natural recipients of the **DEA** requirements are algorithmic and high frequency traders, and expanding the scope of the MiFID II requirements following Article 2(1)(d)(ii) of MiFID II would trigger a number of consequences for those corporate end users , mainly:

a. Need for authorisation as investment firm and as a consequence falling under the requirements of MiFID II, MiFIR and Capital Requirements Regulation.

b. Following the previous argument, the **DEA** user would become a "financial counterparty" as defined for the purposes of EMIR. Therefore the **DEA** user would be subject to higher level obligations imposed by EMIR including mandatory clearing and collateralisation, making irrelevant the EMIR differentiation between OTC derivatives for hedging or speculative purposes.

3. With respect to the differentiation between AOR and **DEA**, ESMA received 47 responses which did not show a clear majority supporting including or excluding AOR from the **DEA** scope. The core argument provided by those considering AOR within the concept of **DEA** was that those orders are not subject to the discretion of the AOR provider.

Conclusion

4. ESMA agrees with market participants on the need to differentiate between the different services provided. In particular, it notes that the use of the concepts of AOR and SOR have raised most of the attention in this respect.

5. ESMA notes that when defining "algorithmic trading", Article 4(1)(39) of MiFID II considers out of that scope systems which are "only used for the purpose of routing orders to one or more trading venues (…) involving no determination of any trading parameters…".

6. On the basis of the responses received to this section of the Consultation Paper (CP) and also the responses provided in relation to the questions about the identification of high frequency trading (HFT), ESMA considers that there are three different elements to consider:

i. SORs are algorithms used for optimisation of order execution processes and may determine parameters of the order other than the venue/s where the order should be submitted. In particular, SORs are able to slice the original order into "child orders" or determine the time of submission of the order or the "child orders". Examples of SORs falling under this category would be trigger-contingent or delayed start time for an order; a trailing stop-loss order; orders contingent upon entry based on other instrument data and iceberg functionalities. SORs fall within the definition of "algorithmic trading" and the relevant MiFID II articles should apply to them.

   As long as those SORs are not embedded in the client's order generating system, but in the market member's/participant's own routing system, it is considered to be out of the scope of **DEA**, as the client of the market member has lost control over the time of submission of the order and its lifetime.

ii. AOR systems encompass those functionalities that determine the trading venue/s where the order should be submitted without changing any other trading parameters of the order (Article 4(1)(39) of MiFID II).

   An AOR as described above does not qualify for or disqualify from the provision of DEA in case it is embedded in the routing systems of an investment firm. AOR in isolation without the rest of the elements of DEA as described in MiFID II (permission to use the DEA provider's trading code for submitting orders directly to the trading venue either through the infrastructure of the DEA provider or not) should not be considered as the provision of DEA. *[emphasis added]*

DEA and other electronic order transmission systems

7. ESMA noted in its CP the proliferation of electronic order transmission systems provided to investors which have become more sophisticated over time. These systems permit clients to transmit orders to investment firms through those firms' web-based interfaces ("online brokerage").

Extract – Final Report, ESMA Technical Advice, 19 Dec 2014 (cont.)

8. ESMA considered that the key differentiating element between these web-based interfaces and **DEA** was the use of individual direct connectivity with separate access.

9. ESMA received 52 answers about using shared connectivity arrangements to qualify a connection to the market as DEA. The first conclusion to be drawn from the responses received was that the definition of "shared connectivity arrangement" was unclear for a significant number of respondents as almost all connectivity lines between investment firms and trading venues have some point of shared connectivity. On that basis, ESMA does not rely on the concept of "shared connectivity" as an indicator for "online brokerage". *[emphasis added]*

10. Instead, ESMA considers that the key element to qualify as DEA is the type of control over order execution that each type of service provides to its users. In the case of orders submitted by DEA users the critical element is the ability of the DEA user to decide on the exact fraction of a second of order entry and lifetime of the orders within that timeframe. *[emphasis added]*

11. ESMA considers systems that allow clients transmitting orders to an investment firm in an electronic format (on-line brokerage) to be outside of the scope of **DEA** as long as the client does not have the ability to determine the fraction of a second where the order should enter the order book or react to incoming market data within those timeframes.

12. ESMA considers that website-based trading systems fall outside the scope of the definition of **DEA** as long as they do not provide the user that type of control over order entry and order execution. This view corresponds with the IOSCO Consultation Report entitled 'Policies on **Direct Electronic Access**' (February 2009) which does not consider "trading models of a customer calling the intermediary or sending an internet order to the intermediary" as **DEA** ***because, as long as the customer's trading is intermediated, it is not 'direct access'.*** *[emphasis added]*

Technical advice

1. The definition of **DEA** as appears in MiFID II does not encompass any other activity beyond the provision of **Direct Market Access** and **Sponsored Access**.
2. The critical element to qualify an activity as **DEA**, regardless of the technology used for those purposes, is the ability to exercise discretion regarding the exact fraction of a second of order entry and the lifetime of the orders within that timeframe.
3. Where a client order is effectively intermediated by the member or participant of the trading venue (and therefore the submitter of the order does not have control over those parameters), the arrangement would be out of the scope of **DEA**. ESMA considers systems that allow clients transmitting orders to an investment firm in an electronic format (on-line brokerage) to be outside the scope of **DEA** as long as the client does not have the ability to determine the fraction of a second where the order should enter the order book or react to incoming market data within those timeframes. Nevertheless, the investment firm would conduct algorithmic trading when submitting those client orders if it uses smart order routers and in that case, it should be compliant with Article 17 of MiFID II.

4. With respect to the differentiation between **DEA** and AOR and SOR, ESMA considers that:

i. SOR systems are **algorithms** used for optimisation of order execution processes and may determine parameters of the order other than the venue(s) where the order should be submitted. In particular, SORs are able to slice the original order into "child orders" or determine the time of submission of the order or the "child orders". Examples of SORs falling under this category would be trigger-contingent or delayed start time for an order; a trailing stop-loss order; orders contingent upon entry based on other instrument data and iceberg functionalities.

SORs fall within the definition of "**algorithmic trading**" and the relevant MiFID II articles should apply to them.

If orders of clients are routed via a SOR of the market member/participant, this arrangement does not constitute **DEA**. SORs used by the client should be considered as **DEA** if the client has a permission to use the trading code of the market member/participant to directly access the market and the SOR is embedded into its systems, not into the **DEA provider's**.

ii. AOR systems encompass those functionalities that determine the trading venue(s) where the order should be submitted without changing any other trading parameter of the order (Article 4(1)(39) of MiFID II).

AOR as described above does by itself not qualify for or disqualify from the provision of **DEA** in case it is embedded in the **DEA** systems. AOR in isolation without the rest of the elements of **DEA** as described in MiFID II (permission to use the **DEA provider's** trading code for submitting orders directly to the trading venue either through the infrastructure of the **DEA provider** or not) should not be considered as **DEA**.

Extract - Delegated Act - European Commission (2398) 24-04-2016

Extract - Delegated Act - European Commission (2398) 24-04-2016

http://ec.europa.eu/transparency/regdoc/rep/3/2016/EN/3-2016-2398-EN-F1-1.PDF

(20) For reasons of clarity and legal certainty and to ensure a uniform application, it is appropriate to provide supplementary provisions in relation to the definitions in relation to algorithmic trading, high frequency algorithmic trading techniques and direct electronic access. In automated trading, various technical arrangements are deployed. It is essential to clarify how those arrangements are to be categorised in relation to the definitions of algorithmic trading and direct electronic access. The trading processes based on direct electronic access are not mutually exclusive to those involving algorithmic trading or its sub-segment high frequency algorithmic trading technique. The trading of a person having direct electronic access may therefore also fall under the algorithmic trading including the high frequency algorithmic trading technique definition. *[emphasis added]*

(21) Algorithmic trading in accordance with Article 4(1)(39) of Directive 2014/65/EU should include arrangements where the system makes decisions, other than only determining the trading venue or venues on which the order should be submitted, at any stage of the trading processes including at the stage of initiating, generating, routing or executing orders. **Therefore, it should be clarified that algorithmic trading, which encompasses trading with no or limited human intervention, should refer not only to the automatic generation of orders but also to the optimisation of order execution processes by automated means**. *[emphasis added]*

(22) Algorithmic trading should encompass smart order routers (SORs) where such devices use algorithms for optimisation of order execution processes that determine parameters of the order other than the venue or venues where the order should be submitted. Algorithmic trading should not encompass automated order routers (AOR) where, although using algorithms, such devices only determine the trading venue or venues where the order should be submitted without changing any other parameter of the order.

(23) High frequency algorithmic trading technique in accordance with Article 4(1)(40) of Directive 2014/65/EU, which is a subset of algorithmic trading, should be further specified through the establishment of criteria to define high message intraday rates which constitutes orders quotes or modifications or cancellations thereof. Using absolute quantitative thresholds on the basis of messaging rates provides legal certainty by allowing firms and competent authorities to assess the individual trading activity of firms. The level and scope of these thresholds should be sufficiently broad to cover trading which constitute high frequency trading technique, including those in relation to single instruments and multiple instruments.

(24) Since the use of high frequency algorithmic trading technique is predominantly common in liquid instruments, only instruments for which there is a liquid market should be included in the calculation of high intraday message rate. Also, given that high frequency algorithmic trading technique is a subset of algorithmic trading, messages introduced for the purpose of trading that fulfil the criteria in Article 17(4) of Directive 2014/65/EU should be included in the calculation of intraday message rates. In order not to capture trading activity other than high frequency algorithmic trading techniques, having regard to the characteristics of such trading as set out in recital 61 of Directive 2014/65/EU, in particular that such trading is typically done by traders using their own capital to implement more traditional trading strategies such as market making or arbitrage through the use of sophisticated technology, only messages introduced for the purposes of dealing on own account, and not those introduced for the purposes of receiving and transmitting orders or executing orders of behalf of clients, should be included in the calculation of high intraday message rates.

However, messages introduced through other techniques than those relying on trading on own account should be included in the calculation of high intraday message rate where, viewed as a whole and taking into account all circumstances, the execution of the technique is structured in such a way as to avoid the execution taking place on own account, such as through the transmission of orders between entities within the same group. In order to take into account, when determining what constitutes high message intra-day rates, the identity of the client ultimately behind the activity, messages which were originated by clients of **DEA providers** should be excluded from the calculation of high intraday message rate in relation to such providers.

(25) The definition of **direct electronic access** should be further specified. The definition of **direct electronic access** should not encompass any other activity beyond the provision of **direct market access** and **sponsored access**. Therefore, arrangements where client orders are intermediated through electronic means by members or participants of a trading venue such as online brokerage and arrangements where clients have **direct electronic access** to a trading venue should be distinguished.

(26) In case of order intermediation, submitters of orders do not have sufficient control over the parameters of the arrangement for market access and should therefore not fall within scope of **direct electronic access**. Therefore, arrangements that allow clients to transmit orders to an investment firm in an electronic format, such as online brokerage, should be not be considered **direct electronic access** provided that clients do not have the ability to determine the fraction of a second of order entry and the life time of orders within that time frame.

(27) Arrangements where the client of a member or participant of a trading venue, including the client of a direct clients of organised trading facilities (OTFs), submit their orders through arrangements for optimisation of order execution processes that determine parameters of the order other than the venue or venues where the order should be submitted through SORs embedded into the provider's infrastructure and not on the client's infrastructure should be excluded from the scope of **direct electronic access** since the client of the provider does not have control over the time of submission of the order and its lifetime. The characterisation of **direct electronic access** when deploying smart order routers should therefore be dependent on whether the smart order router is embedded in the clients' systems and not in that of the provider.

…

Article 18 Algorithmic trading (Article 4(1)(39) of Directive 2014/65/EU)

For the purposes of further specifying the definition of algorithmic trading in accordance with Article 4(1)(39) of Directive 2014/65/EU, a system shall be considered as having no or limited human intervention where, for any order or quote generation process or any process to optimise order-execution, an automated system makes decisions at any of the stages of initiating, generating, routing or executing orders or quotes according to pre-determined parameters.

Extract - Delegated Act - European Commission (2398) 24-04-2016 (cont.)

Article 19 High frequency algorithmic trading technique (Article 4(1)(40) of Directive 2014/65/EU)

1. A high message intraday rate in accordance with Article 4(1)(40) of Directive 2014/65/EU shall consist of the submission on average of any of the following:

(a) at least 2 messages per second with respect to any single financial instrument traded on a trading venue;

(b) at least 4 messages per second with respect to all financial instruments traded on a trading venue.

2. For the purposes of paragraph 1, messages concerning financial instruments for which there is a liquid market in accordance with Article 2(1)(17) of Regulation (EU) No 600/2014 shall be included in the calculation. Messages introduced for the purpose of trading that fulfil the criteria in Article 17(4) of Directive No 2014/65/EU shall be included in the calculation.

3. For the purposes of paragraph 1, messages introduced for the purpose of dealing on own account shall be included in the calculation. Messages introduced through other trading techniques than those relying on dealing on own account shall be included in the calculation where the firm's execution technique is structured in such a way as to avoid that the execution takes place on own account.

4. For the purposes of paragraph 1, for the calculation of high message intraday rate in relation to DEA providers, messages submitted by their DEA clients shall be excluded from the calculations.

5. For the purposes of paragraph 1, trading venues shall make available to the firms concerned, on request, estimates of the average of messages per second on a monthly basis two weeks after the end of each calendar month taking into account all messages submitted during the preceding 12 months.

Article 20 Direct electronic access (Article 4(1)(41) of Directive 2014/65/EU)

1. A person shall be considered not capable of electronically transmitting orders relating to a financial instrument directly to a trading venue in accordance with Article 4(1)(41) of Directive 2014/65/EU where that person cannot exercise discretion regarding the exact fraction of a second of order entry and the lifetime of the order within that timeframe.

2. A person shall be considered not capable of such direct electronic order transmission where it takes place through arrangements for optimisation of order execution processes that determine the parameters of the order other than the venue or venues where the order should be submitted, unless these arrangements are embedded into the clients' systems and not into those of the member or participant of a regulated market or of an MTF or a client of an OTF.

Extract - RTS 6 – European Commission (4478) 19-07-2016

Extract - RTS 6 – European Commission (4478) 19-07-2016

http://ec.europa.eu/transparency/regdoc/rep/3/2016/EN/3-2016-4478-EN-F1-1.PDF

EXPLANATORY MEMORANDUM

CONTEXT OF THE DELEGATED ACT As stated in Recital (59) of Directive 2014/65/EU (MiFID II), the use of trading technology has evolved significantly over the past decade and is now extensively used by market participants. The potential risks arising from algorithmic trading can be present in any trading model supported by electronic means and deserve specific attention and regulation. Accordingly, Article 17 of establishes a number of requirements with respect to investment firms engaging in algorithmic trading. *[emphasis added]*

The final draft RTS developed by ESMA under Article 17(7)(a) of MiFID II further specifies the organisational requirements to be met by all investment firms engaging in **algorithmic trading**, providing **direct electronic access** (**DEA**) or acting as general clearing members in a manner appropriate to the nature, scale and complexity of their business model, addressing the potential impact of algorithms on the overall market. Those requirements supplement the authorisation and operating conditions to be met by each and every investment firm authorised under MiFID II.

…

THE EUROPEAN COMMISSION, Having regard to the Treaty on the Functioning of the European Union, Having regard to Directive 2014/65/EU of the European Parliament and of the Council of 15 May 2014 on markets in financial instruments amending Directive 2002/92/EC and Directive 2011/61/EU1 , and in particular points (a) and (d) of Article 17(7) thereof. Whereas:

(1) Systems and risk controls used by an investment firm engaged in **algorithmic trading**, providing **direct electronic access** or acting as general clearing members, should be efficient, resilient and have adequate capacity, having regard to the nature, scale and complexity of the business model of that investment firm.

(2) To that end, an investment firm should address all risks that may affect the core elements of an **algorithmic trading system**, including risks related to the hardware, software and associated communication lines used by that firm to perform its trading activities. To ensure the same conditions for algorithmic trading independently of trading form, any type of execution system or order management system operated by an investment firm should be covered by this Regulation.

(3) As a part of its overall governance framework and decision making framework, an investment firm should have a clear and formalised governance arrangement, including clear lines of accountability, effective procedures for the communication of information and a separation of tasks and responsibilities. That arrangement should ensure reduced dependency on a single person or unit.

(4) Conformance testing should be made in order to verify that the trading systems of an investment firm communicate and interact properly with the trading systems of the trading venue or of the **direct market access** (**DMA**) provider and that market data are processed correctly.

(5) Investment decision algorithms make automated trading decisions by determining which financial instrument should be purchased or sold. Order execution algorithms optimise order-execution processes by automatic generation and submission of orders or quotes, to one or several trading venues once the investment decision has been taken. Trading algorithms that are investment decision algorithms should be differentiated from order execution algorithms having regard to their potential impact on the overall fair and orderly functioning of the market.

(6) The requirements concerning the testing of trading algorithms should be based on the potential impact that those algorithms may have on the overall fair and orderly functioning of the market. In this regard, only pure investment decision algorithms which generate orders that are only to be executed by non-automated means and with human intervention should be excluded from the testing requirements.

(7) When introducing trading algorithms, an investment firm should ensure controlled deployment of trading algorithms, regardless of whether those trading algorithms are new or previously have been successfully deployed in another trading venue, and whether their architecture has been materially modified. The controlled deployment of trading algorithms should ensure that the trading algorithms perform as expected in a production environment. The investment firm should therefore set cautious limits on the number of financial instruments being traded, the price, value and number of orders, the strategy positions and the number of markets involved and by monitoring the activity of the algorithm more intensively.

(8) Compliance with the specific organisational requirements for an investment firm should be determined according to a self-assessment which includes an assessment of compliance with the criteria set out in Annex I to this Regulation. That self-assessment should furthermore include all other circumstances that may have an impact on the organisation of that investment firm. That self-assessment should be made regularly and should allow the investment firm to gain a full understanding of the trading systems and trading algorithms it uses and the risks stemming from algorithmic trading, **irrespective of whether those systems and algorithms were developed by the investment firm itself, purchased from a third party, or designed or developed in close cooperation with a client or a third party.** [emphasis added]

(9) An investment firm should be able to withdraw all or some of its orders where this becomes necessary ('kill functionality'). For such a withdrawal to be effective, an investment firm should always be in a position to know which trading algorithms, traders or clients are responsible for an order.

(10) An investment firm engaged in algorithmic trading should monitor that its trading systems cannot be used for any purpose that is contrary to Regulation (EU) 596/2014 of the European Parliament and of the Council or to the rules of a trading venue to which it is connected. Suspicious transactions or orders should be reported to the competent authorities in accordance with that Regulation.

Extract - RTS 6 – European Commission (4478) 19-07-2016 (Chapter II Resilience of Trading Systems)

(11) Different types of risks should be addressed by different types of controls. Pre-trade controls should be conducted before an order is submitted to a trading venue. An investment firms should also monitor its trading activity and implement real-time alerts which identify signs of disorderly trading or a breach of its pre-trade limits. Post-trade controls should be put in place to monitor the market and credit risks of the investment firm through post-trade reconciliation. In addition, potential market abuse and violations of the rules of the trading venue should be prevented through specific surveillance systems that generate alerts on the following day at the latest and that are calibrated to minimise false positive and false negative alerts.

(12) The generation of alerts following real time monitoring should be done as instantaneously as technically possible. Any actions following that monitoring should be undertaken as soon as possible having regard to a reasonable level of efficiency and expenditure of the persons and systems concerned.

(13) An investment firm providing **direct electronic access** ('**DEA provider**') should remain responsible for the trading carried out through the use of its trading code by its DEA clients. A **DEA provider** should therefore establish policies and procedures to ensure that trading of its **DEA clients** complies with the requirements applicable to that provider. That responsibility should constitute the principal factor for establishing pretrade and post-trade controls and for assessing the suitability of prospective **DEA clients**. A **DEA provider** should therefore have sufficient knowledge about the intentions, capabilities, financial resources and trustworthiness of its **DEA clients**, including, where publicly available, information about the prospective **DEA clients**' disciplinary history with competent authorities and trading venues.

(14) A DEA provider should comply with the provisions of this Regulation even where it is not engaged in algorithmic trading, since its clients may use the DEA to engage in algorithmic trading. *[emphasis added]*

(15) Due diligence assessment of prospective **DEA clients** should be adapted to the risks posed by the nature, scale and complexity of their expected trading activities and to the **DEA** being provided. In particular, the expected level of trading and order volume and the type of connection offered to the relevant trading venues should be assessed.

(16) The content and format of the forms to be used by an investment firm engaged in high frequency trading technique for submitting to the competent authorities the records of its placed orders and the length of time that those records should be kept should be laid down.

(17) To ensure consistency with the general obligation for an investment firm to keep records of orders, the required record keeping periods for an investment firm engaging in high-frequency algorithmic trading technique should be aligned with the ones laid down in Article 25(1) of Regulation (EU) No 600/2014 of the European Parliament and of the Council.

(18) For reasons of consistency and in order to ensure the smooth functioning of the financial markets, it is necessary that the provisions laid down in this Regulation and the related national provisions transposing Directive 2014/65/EU apply from the same date.

(19) This Regulation is based on the draft regulatory technical standards submitted by the European Securities and Markets Authority ('ESMA') to the Commission.

…

[Note that Articles 1 through 12 have been excluded from this document; while detailing the requirements of firms engaged in algorithmic trading they do not offer anything further in understanding what constitutes algorithmic trading or DEA]

Article 13 (Article 17(1) of Directive 2014/65/EU) Automated surveillance system to detect market manipulation

1. An investment firm shall monitor all trading activity that takes place through its trading systems, including that of its clients, for signs of potential market manipulation as referred to in Article 12 of Regulation (EU) No 596/2014.

2. For the purposes of paragraph 1, the investment firm shall establish and maintain an automated surveillance system which effectively monitors orders and transactions, generates alerts and reports and, where appropriate, employs visualisation tools.

3. The automated surveillance system shall cover the full range of trading activities undertaken by the investment firm and all orders submitted by it. It shall be designed having regard to the nature, scale and complexity of the investment firm's trading activity, such as the type and volume of instruments traded, the size and complexity of its order flow and the markets accessed.

4. The investment firm shall cross-check any indications of suspicious trading activity that have been generated by its automated surveillance system during the investigation phase against other relevant trading activities undertaken by that firm.

5. The investment firm's automated surveillance system shall be adaptable to changes to the regulatory obligations and the trading activity of the investment firm, including changes to its own trading strategy and that of its clients.

6. The investment firm shall review its automated surveillance system at least once a year to assess whether that system and the parameters and filters employed by it are still adequate to the investment firm's regulatory obligations and trading activity, including its ability to minimise the generation of false positive and false negative surveillance alerts.

7. Using a sufficiently detailed level of time granularity, the investment firm's automated surveillance system shall be able to read, replay and analyse order and transaction data on an ex-post basis, with sufficient capacity to be able to operate in an automated low-latency trading environment where relevant. It shall also be able to generate operable alerts at the beginning of the following trading day or, where manual processes are involved, at the end of the following trading day. The investment firm's surveillance system shall have adequate documentation and procedures in place for the effective follow-up to alerts generated by it.

8. Staff responsible for monitoring the investment firm's trading activities for the purposes of paragraphs 1 to 7 shall report to the compliance function any trading activity that may not be compliant with the investment firm's policies and procedures or with its regulatory obligations. The compliance function shall assess that information and take appropriate action. Such action shall include reporting to the trading venue or submitting a suspicious transaction or order report in accordance with Article 16 of Regulation (EU) No 596/2014.

…

Extract - RTS 6 – European Commission (4478) 19-07-2016 (Chapter II Resilience of Trading Systems)

Article 15 (Article 17(1) of Directive 2014/65/EU) Pre-trade controls on order entry

1. An investment firm shall carry out the following pre-trade controls on order entry for all financial instruments:

(a) price collars, which automatically block or cancel orders that do not meet set price parameters, differentiating between different financial instruments, both on an order-by-order basis and over a specified period of time;

(b) maximum order values, which prevent orders with an uncommonly large order value from entering the order book;

(c) maximum order volumes, which prevent orders with an uncommonly large order size from entering the order book;

(d) maximum messages limits, which prevent sending an excessive number of messages to order books pertaining to the submission, modification or cancellation of an order.

2. An investment firm shall immediately include all orders sent to a trading venue into the calculation of the pre-trade limits referred to in paragraph 1.

3. An investment firm shall have in place repeated automated execution throttles which control the number of times an **algorithmic trading** strategy has been applied. After a pre-determined number of repeated executions, the trading system shall be automatically disabled until re-enabled by a designated staff member.

4. An investment firm shall set market and credit risk limits that are based on its capital base, its clearing arrangements, its trading strategy, its risk tolerance, experience and certain variables, such as the length of time the investment firm has been engaged in **algorithmic trading** and its reliance on third party vendors. The investment firm shall adjust those market and credit risk limits to account for the changing impact of the orders on the relevant market due to different price and liquidity levels.

5. An investment firm shall automatically block or cancel orders from a trader if it becomes aware that that trader does not have permission to trade a particular financial instrument. An investment firm shall automatically block or cancel orders where those orders risk compromising the investment firm's own risk thresholds. Controls shall be applied, where appropriate, on exposures to individual clients, financial instruments, traders, trading desks or the investment firm as a whole.

6. An investment firm shall have procedures and arrangements in place for dealing with orders which have been blocked by the investment firm's pre-trade controls but which the investment firm nevertheless wishes to submit. Such procedures and arrangements shall be applied in relation to a specific trade on a temporary basis and in exceptional circumstances. They shall be subject to verification by the risk management function and authorisation by a designated individual of the investment firm.

Article 16 (Article 17(1) of Directive 2014/65/EU) Real-time monitoring

1. An investment firm shall, during the hours it is sending orders to trading venues, monitor in real time all **algorithmic trading** activity that takes place under its trading code, including that of its clients, for signs of disorderly trading, including trading across markets, asset classes, or products, in cases where the firm or its clients engage in such activities.

2. The real-time monitoring of **algorithmic trading** activity shall be undertaken by the trader in charge of the trading algorithm or **algorithmic trading** strategy, by the risk management function or by an independent risk control function established for the purpose of this provision. Such risk control function shall be considered to be independent, regardless of whether the real-time monitoring is conducted by a member of the staff of the investment firm or by a third party, provided that that function is not hierarchically dependent on the trader and can challenge the trader as appropriate and necessary within the governance framework referred to in Article 1.

3. Staff members in charge of the real-time monitoring shall respond to operational and regulatory issues in a timely manner and shall initiate remedial action where necessary.

4. An investment firm shall ensure that the competent authority, the relevant trading venues and, where applicable, **DEA providers**, clearing members and central counterparties can at all times have access to staff members in charge of real-time monitoring. For that purpose, the investment firm shall identify and periodically test its communication channels, including its contact procedures for out of trading hours, to ensure that in an emergency the staff members with the adequate level of authority may reach each other in time.

5. The systems for real-time monitoring shall have real-time alerts to assist staff in identifying unanticipated trading activities undertaken by means of an algorithm. An investment firm shall have a process in place to take remedial action as soon as possible after an alert has been generated, including, where necessary, an orderly withdrawal from the market. Those systems shall also provide alerts in relation to algorithms and **DEA** orders triggering circuit breakers of a trading venue. Real-time alerts shall be generated within five seconds after the relevant event.

Extract - RTS 6 – European Commission (4478) 19-07-2016 (Chapter III Direct Electronic Access)

Article 17 (Article 17(1) of Directive 2014/65/EU) Post-trade controls

1. An investment firm shall continuously operate the post-trade controls that it has in place. Where a post-trade control is triggered, the investment firm shall undertake appropriate action, which may include adjusting or shutting down the relevant trading algorithm or trading system or an orderly withdrawal from the market.

2. Post-trade controls referred to in paragraph 1 shall include the continuous assessment and monitoring of market and credit risk of the investment firm in terms of effective exposure.

3. An investment firm shall keep records of trade and account information, which are complete, accurate and consistent. The investment firm shall reconcile its own electronic trading logs with information about its outstanding orders and risk exposures as provided by the trading venues to which it sends orders, by its brokers or **DEA providers**, by its clearing members or central counterparties and by its data providers or other relevant business partners. Reconciliation shall be made in realtime where the aforementioned market participants provide the information in realtime. An investment firm shall have the capability to calculate in real time its outstanding exposure and that of its traders and clients.

4. For derivatives, the post-trade controls referred to in paragraph 1 shall include controls regarding the maximum long and short and overall strategy positions, with trading limits to be set in units that are appropriate to the types of financial instruments involved.

5. Post-trade monitoring shall be undertaken by the traders responsible for the algorithm and the risk control function of the investment firm.

…

CHAPTER III DIRECT ELECTRONIC ACCESS

Article 19 (Article 17(5) of Directive 2014/65/EU) General provisions for DEA

A **DEA provider** shall establish policies and procedures to ensure that trading of its **DEA clients** complies with the trading venue's rules so as to ensure that the **DEA provider** meets the requirements in accordance with Article 17(5) of Directive 2014/65/EU.

Article 20 (Article 17(5) of Directive 2014/65/EU) Controls of DEA providers

1. A **DEA provider** shall apply the controls laid down in Articles 13, 15 and 17 and the real-time monitoring laid down in Article 16 to the order flow of each of its **DEA clients**. Those controls and that monitoring shall be separate and distinct from the controls and monitoring applied by **DEA clients**. In particular, the orders of a **DEA client** shall always pass through the pre-trade controls that are set and controlled by the **DEA provider**.

2. A **DEA provider** may use its own pre-trade and post-trade controls, controls provided by a third party or controls offered by the trading venue and real time monitoring. In all circumstances, the **DEA provider** shall remain responsible for the effectiveness of those controls. The **DEA provider** shall also ensure that it is solely entitled to set or modify the parameters or limits of those pre-trade and post-trade controls and real time monitoring. The **DEA provider** shall monitor the performance of the pre-trade and post-trade controls on an on-going basis.

3. The limits of the pre-trade controls on order submission shall be based on the credit and risk limits which the **DEA provider** applies to the trading activity of its **DEA clients**. Those limits shall be based on the initial due diligence and periodic review of the **DEA client** by the **DEA provider**.

4. The parameters and limits of the controls applied to **DEA clients** using **sponsored access** shall be as stringent as those imposed on **DEA clients** using **DMA**.

Article 21 (Article 17(5) of Directive 2014/65/EU) Specifications for the systems of DEA providers

1. A **DEA provider** shall ensure that its trading systems enable it to:

(a) monitor orders submitted by a **DEA client** using the trading code of the **DEA provider**;

(b) automatically block or cancel orders from individuals which operate trading systems that submit orders related to **algorithmic trading** and which lack authorisation to send orders through **DEA;**

(c) automatically block or cancel orders from a **DEA client** for financial instruments which that client is not authorised to trade, using an internal flagging system to identify and block single **DEA clients** or a group of **DEA clients**;

(d) automatically block or cancel orders from a **DEA client** that breach the risk management thresholds of the **DEA provider**, applying controls to exposures of individual **DEA clients**, financial instruments or groups of **DEA clients**;

(e) stop order flows transmitted by its **DEA clients**;

Extract - RTS 6 – European Commission (4478) 19-07-2016 (Chapter III Direct Electronic Access) (cont.)

(f) suspend or withdraw **DEA** services to any **DEA client** where the **DEA provider** is not satisfied that continued access would be consistent with its rules and procedures for fair and orderly trading and market integrity;

(g) carry out, whenever necessary, a review of the internal risk control systems of **DEA clients**. 2. A **DEA provider** shall have procedures to evaluate, manage and mitigate market disruption and firm-specific risks. The **DEA provider** shall be able to identify the persons to be notified in the event of an error resulting in violations of the risk profile or in potential violations of the trading venue's rules.

3. A **DEA provider** shall at all times be able to identify its different **DEA clients** and the trading desks and traders of those **DEA clients**, who submit orders through the **DEA provider's** systems, by assigning a unique identification code to them.

4. A **DEA provider** allowing a **DEA client** to provide its **DEA** access to its own clients ('sub-delegation') shall be able to identify the different order flows from the beneficiaries of such sub-delegation without being required to know the identity of the beneficiaries of such arrangement.

5. A **DEA provider** shall record data relating to the orders submitted by its **DEA clients**, including modifications and cancellations, the alerts generated by its monitoring systems and the modifications made to its filtering process.

Article 22 (Article 17(5) of Directive 2014/65/EU) Due diligence assessment of prospective DEA clients

1. A **DEA provider** shall conduct a due diligence assessment of its prospective **DEA clients** to ensure that they meet the requirements set out in this Regulation and the rules of the trading venue to which it offers access.

2. The due diligence assessment referred to in paragraph 1 shall cover:

(a) the governance and ownership structure of the prospective **DEA client**;

(b) the types of strategies to be undertaken by the prospective **DEA client**;

(c) the operational set-up, the systems, the pre-trade and post-trade controls and the real time monitoring of the prospective **DEA client**. The investment firm offering **DEA** allowing **DEA clients** to use third-party trading software for accessing trading venues shall ensure that the software includes pre-trade controls that are equivalent to the pre-trade controls set out in this Regulation.

(d) the responsibilities within the prospective **DEA client** for dealing with actions and errors;

(e) the historical trading pattern and behaviour of the prospective **DEA client**;

(f) the level of expected trading and order volume of the prospective **DEA client**;

(g) the ability of the prospective **DEA client** to meet its financial obligations to the **DEA provider**;

(h) the disciplinary history of the prospective **DEA client**, where available.

3. A **DEA provider** allowing sub-delegation shall ensure that a prospective **DEA client**, before granting that client access, has a due diligence framework in place that is at least equivalent to the one described in paragraphs 1 and 2.

Article 23 (Article 17(5) of Directive 2014/65/EU) Periodic review of DEA clients

1. A **DEA provider** shall review its due diligence assessment processes annually.

2. A **DEA provider** shall carry out an annual risk-based reassessment of the adequacy of its clients' systems and controls, in particular taking into account changes to the scale, nature or complexity of their trading activities or strategies, changes to their staffing, ownership structure, trading or bank account, regulatory status, financial position and whether a **DEA client** has expressed an intention to sub-delegate the access it receives from the **DEA provider**.

…

Extract - RTS 7 – European Commission (4387) 14-07-2016

Extract - RTS 7 – European Commission (4387) 14-07-2016

http://ec.europa.eu/finance/securities/docs/isd/mifid/rts/160714-rts-7_en.pdf

EXPLANATORY MEMORANDUM

3. LEGAL ELEMENTS OF THE DELEGATED ACT

This Regulation lays down detailed rules for the organisational requirements of the trading venues' systems allowing or enabling **algorithmic trading**, in relation to their resilience and capacity, requirements on trading venues to ensure appropriate testing of algorithms and to the controls concerning **direct electronic access** (**DEA**). Chapter 1 sets out the general organisational requirements, including governance, compliance functions, staffing, and outsourcing. Chapter 2, further specifies requirements in relation to capacity and resilience of trading venues, including due diligence of members, testing, capacity requirements, monitoring, periodic review, business continuity, measures to prevent disorderly trading conditions, mechanisms to manage volatility, and requirements in relation to **DEA**.

…

(15) The provision of **direct electronic access** (**DEA**) service to an indeterminate number of persons may pose a risk to the provider of that service and also to the resilience and capacity of the trading venue where the orders are sent. To address such risks, where trading venues allow sub-delegation, the **DEA provider** should be able to identify the different order flows from the beneficiaries of sub-delegation.

(16) Where **sponsored access** is permitted by a trading venue, prospective **sponsored access** clients should be subjected to a process of authorization by the trading venue. Trading venues should also be allowed to decide that the provision of **direct market access** services by their members is subject to authorisation.

(17) Trading venues should specify the requirements to be met by their members in order for them to be allowed to provide **DEA** and determine the minimum standards to be met by prospective **DEA clients** in the due diligence process. Those requirements and standards should be adapted to the risks posed by the nature, scale and complexity of their expected trading, and the service being provided. In particular, they should include an assessment of the level of expected trading, the order volume and the type of connection offered.

…

CHAPTER II CAPACITY AND RESILIENCE OF TRADING VENUES

Article 7 (Article 48(1) of Directive 2014/65/EU) Due diligence for members of trading venues

1. Trading venues shall set out the conditions for using its electronic order submission systems by its members. Those conditions shall be set having regard to the trading model of the trading venue and shall cover at least the following:

(a) pre-trade controls on price, volume and value of orders and usage of the system and post-trade controls on the trading activities of the members;

(b) qualifications required of staff in key positions within the members;

(c) technical and functional conformance testing;

(d) policy of use of the kill functionality; (e) provisions on whether the member may give its own clients **direct electronic access** to the system and if so, the conditions applicable to those clients.

2. Trading venues shall undertake a due diligence assessment of their prospective members against the conditions referred to in paragraph 1 and shall set out the procedures for such assessment.

3. Trading venues shall, once a year, conduct a risk-based assessment of the compliance of their members with the conditions referred to in paragraph 1 and check whether their members are still registered as investment firms. The risk-based assessment shall take into account the scale and potential impact of trading undertaken by each member as well as the time elapsed since the member's last risk based assessment.

4. Trading venues shall, where necessary, undertake additional assessments of their members' compliance with the conditions referred to in paragraph 1 following the annual risk-based assessment laid down in paragraph 3.

…

Article 9 (Article 48(6) of Directive 2014/65/EU) Conformance testing

1. Trading venues shall require their members to undertake conformance testing prior to the deployment or a substantial update of:

(a) the access to the trading venue's system;

(b) the member's trading system, trading algorithm or trading strategy.

2. The conformance testing shall ensure that the basic functioning of the member's trading system, **algorithm and strategy** complies with the trading venue's conditions.

3. The conformance testing shall verify the functioning of the following:

(a) the ability of the system or **algorithm** to interact as expected with the trading venue's matching logic and the adequate processing of the data flows from and to the trading venue;

(b) the basic functionalities such as submission, modification or cancellation of an order or an indication of interest, static and market data downloads and all business data flows;

(c) the connectivity, including the cancel on disconnect command, market data feed loss and throttles, and the recovery, including the intra-day resumption of trading and the handling of suspended instruments or non-updated market data.

4. Trading venues shall provide a conformance testing environment to their actual and prospective members which:

(a) is accessible on conditions equivalent to those applicable to the trading venue's other testing services;

(b) provides a list of financial instruments which can be tested and which are representative of every class of instruments available in the production environment;

(c) is available during general market hours or, if available only outside market hours, on a pre-scheduled periodic basis;

(d) is supported by staff with sufficient knowledge.

5. Trading venues shall deliver a report of the results of the conformance testing to the actual or prospective member only.

Extract - RTS 7 – European Commission (4387) 14-07-2016

6. Trading venues shall require their actual and prospective members to use their conformance testing facilities.

7. Trading venues shall ensure an effective separation of the testing environment from the production environment for the conformance testing referred to in paragraphs 1 to 3.

…

Article 10 (Article 48(6) of Directive 2014/65/EU) Testing the members' algorithms to avoid disorderly trading conditions

1. Trading venues shall require their members to certify that the **algorithms** they deploy have been tested to avoid contributing to or creating disorderly trading conditions prior to the deployment or substantial update of a **trading algorithm or trading strategy** and explain the means used for that testing.

2. Trading venues shall provide their members with access to a testing environment which shall consist of any of the following:

(a) simulation facilities which reproduce as realistically as possible the production environment, including disorderly trading conditions, and which provide the functionalities, protocols and structure that allow members to test a range of scenarios that they consider relevant to their activity;

(b) testing symbols as defined and maintained by the trading venue.

3. Trading venues shall ensure an effective separation of the testing environment from the production environment for the tests referred to in paragraph 1.

…

Article 20 (Article 48(4) and (6) of Directive 2014/65/EU) Pre-trade and post-trade controls

1. Trading venues shall carry out the following pre-trade controls adapted for each financial instruments traded on them:

(a) price collars, which automatically block orders that do not meet pre-set price parameters on an order-by-order basis;

(b) maximum order value, which automatically prevents orders with uncommonly large order values from entering the order book by reference to notional values per financial instrument;

(c) maximum order volume, which automatically prevents orders with an uncommonly large order size from entering the order book.

2. The pre-trade controls laid down in paragraph 1 shall be designed so as to ensure that:

(a) their automated application has the ability to readjust a limit during the trading session and in all its phases;

(b) their monitoring has a delay of no more than five seconds;

(c) an order is rejected once a limit is breached;

d) procedures and arrangements are in place to authorise orders above the limits upon request from the member concerned. Such procedures and arrangements shall apply in relation to a specific order or set of orders on a temporary basis in exceptional circumstances.

3. Trading venues may establish the post-trade controls that they deem appropriate on the basis of a risk assessment of their members' activity.

Article 21 (Article 48 (7) of Directive 2014/65/EU) Pre-determination of the conditions to provide direct electronic access

Trading venues permitting **DEA** through their systems shall set out and publish the rules and conditions pursuant to which their members may provide **DEA** to their own clients. Those rules and conditions shall at least cover the specific requirements set out in Article 22 of [regulation in footnote].

Article 22 (Article 48 (7) of Directive 2014/65/EU) Specific requirements for trading venues permitting sponsored access

1. Trading venues shall make the provision of **sponsored access** subject to their authorisation and shall require that firms having **sponsored access** are subject to at least the same controls as those referred to in Article 18(3)(b).

2. Trading venues shall ensure that **sponsored access** providers are at all times exclusively entitled to set or modify the parameters that apply to the controls referred to in paragraph 1 over the order flow of their **sponsored access** clients.

3. Trading venues shall be able to suspend or withdraw the provision of **sponsored access** to clients having infringed Directive 2014/65/EU, Regulation (EU) No 600/2014, Regulation (EU) No 596/2014 or the trading venue's internal rules.

…

Extract - RTS 22 – European Commission 28-07-2016

Extract - RTS 22 – European Commission

http://ec.europa.eu/finance/securities/docs/isd/mifid/rts/160728-rts-22_en.pdf

EXPLANATORY MEMORANDUM

CONTEXT OF THE DELEGATED ACT

The Markets in Financial Instruments Regulation (EU) No 600/2014 (MiFIR) requires investment firms to report complete and accurate details of transactions in financial instruments no later than the close of the following working day. In this context, Article 26(9) of MiFIR empowers ESMA to develop draft regulatory technical standards to specify further the rules applicable to reporting transactions to competent authorities by investment firms.

…

(9) Persons or computer algorithms which make investment decisions may be responsible for market abuse. Therefore, in order to ensure effective market surveillance, where investment decisions are made by a person other than the client or by a computer algorithm, the person or algorithm should be identified in the transaction report using unique, robust and consistent identifiers. Where more than one person in an investment firm makes the investment decision, the person taking the primary responsibility for the decision should be identified in the report.

(10) The persons or computer algorithms responsible for determining the venue to access or an investment firm to which the orders are to be transmitted or any other conditions related to the execution of the order may thereby be responsible for market abuse. Therefore, in order to ensure effective market surveillance, a person or computer algorithm within the investment firm that is responsible for such activities should be identified in the transaction report. Where both a person and computer algorithm are involved, or more than one person or algorithm is involved, the investment firm should determine, on a consistent basis following predetermined criteria, which person or algorithm is primarily responsible for those activities.

…

Article 4 Transmission of an order

(1) An investment firm transmitting an order pursuant to Article 26(4) of Regulation (EU) No 600/2014 (transmitting firm) shall be deemed to have transmitted that order only if the following conditions are met:

(a) the order was received from its client or results from its decision to acquire or dispose of a specific financial instrument in accordance with a discretionary mandate provided to it by one or more clients;

(b) the transmitting firm has transmitted the order details referred to in paragraph 2 to another investment firm (receiving firm);

(c) the receiving firm is subject to Article 26(1) of Regulation No 600/2014 and agrees either to report the transaction resulting from the order concerned or to transmit the order details in accordance with this Article to another investment firm.

For the purposes of point (c) of the first subparagraph the agreement shall specify the time limit for the provision of the order details by the transmitting firm to the receiving firm and provide that the receiving firm shall verify whether the order details received contain obvious errors or omissions before submitting a transaction report or transmitting the order in accordance with this Article. 2. The following order details shall be transmitted in accordance with paragraph 1, insofar as pertinent to a given order:

(a) the identification code of the financial instrument;

(b) whether the order is for the acquisition or disposal of the financial instrument;

(c) the price and quantity indicated in the order;

(d) the designation and details of the client of the transmitting firm for the purposes of the order ;

(e) the designation and details of the decision maker for the client where the investment decision is made under a power of representation;

(f) a designation to identify a short sale;

(g) a designation to identify a person or algorithm responsible for the investment decision within the transmitting firm;

(h) country of the branch of the investment firm where the person responsible for the investment decision is located and country of the investment firm's branch that received the order from the client or made an investment decision for a client in accordance with a discretionary mandate given to it by the client

(i) for an order in commodity derivatives, an indication whether the transaction is to reduce risk in an objectively measurable way in accordance with Article 57 of Directive 2014/65/EU;

(j) the code identifying the transmitting firm.

For the purposes of point (d) of the first subparagraph, where the client is a natural person, the client shall be designated in accordance with Article 6.

For the purposes of point (i) of the first subparagraph, where the order transmitted was received from a prior firm that did not transmit the order in accordance with the conditions set out in this Article, the code shall be the code identifying the transmitting firm. Where the order transmitted was received from a prior transmitting firm in accordance with the conditions set out in this Article, the code provided pursuant to point (j) referred to in the first subparagraph shall be the code identifying the prior transmitting firm.

3. Where there is more than one transmitting firm in relation to a given order, the order details referred to in points (d) to (i) of the first subparagraph of paragraph 2 shall be transmitted in respect of the client of the first transmitting firm.

4. Where the order is aggregated for several clients, information referred to in paragraph 2 shall be transmitted for each client.

…

Extract - RTS 22 – European Commission 28-07-2016 (cont.)

Article 8 Identification of person or computer algorithm responsible for the investment decision

1. Where a person or computer algorithm within an investment firm makes the investment decision to acquire or dispose of a specific financial instrument, that person or computer algorithm shall be identified as specified in field 57 of Table 2 of Annex I. The investment firm shall only identify such a person or computer algorithm where that investment decision is made either on behalf of the investment firm itself, or on behalf of a client in accordance with a discretionary mandate given to it by the client.

2. Where more than one person within the investment firm takes the investment decision, the investment firm shall determine the person taking the primary responsibility for that decision. The person taking primary responsibility for the investment decision shall be determined in accordance with pre-determined criteria established by the investment firm.

3. Where a computer algorithm within the investment firm is responsible for the investment decision in accordance with paragraph 1, the investment firm shall assign a designation for identifying the computer algorithm in a transaction report. That designation shall comply with the following conditions:

(a) it is unique for each set of code or trading strategy that constitutes the algorithm, regardless of the financial instruments or markets that the algorithm applies to;

(b) it is used consistently when referring to the algorithm or version of the algorithm once assigned to it;

(c) it is unique over time.

Article 9 Identification of person or computer algorithm responsible for execution of a transaction

1. Where a person or computer algorithm within the investment firm which executes a transaction determines which trading venue, systematic internaliser or organised trading platform located outside the Union to access, which firms to transmit orders to or any conditions related to the execution of an order, that person or computer algorithm shall be identified in field 59 of Table 2 of Annex I.

2. Where a person within the investment firm is responsible for the execution of the transaction, the investment firm shall assign a designation for identifying that person in a transaction report in accordance with Article 7.

3. Where a computer algorithm within the investment firm is responsible for the execution of the transaction, the investment firm shall assign a designation for identifying the computer algorithm in accordance with Article 8(3).

4. Where a person and computer algorithm are both involved in execution of the transaction, or more than one person or algorithm are involved, the investment firm shall determine which person or computer algorithm is primarily responsible for the execution of the transaction. The person or computer algorithm taking primary responsibility for the execution shall be determined in accordance with predetermined criteria established by the investment firm.

Extract - Guidelines Transaction reporting, order record keeping and clock synchronisation under MiFID II - 10 October 2016 (updated 8 August 2017)

Extract - Guidelines Transaction reporting, order record keeping and clock synchronisation under MiFID II

https://www.esma.europa.eu/sites/default/files/library/2016-1452_guidelines_mifid_ii_transaction_reporting.pdf

5.2.4 Restrictions on trading capacities

Investment Firms dealing on own account or on a matched principal trading basis are acting directly themselves and cannot 'transmit orders' under Article 4 of RTS 22 as any orders they submit to another Firm or Investment Firm are their own orders rather than being transmission of an order received from a client or resulting from a decision to acquire or dispose of a financial instrument for a client under a discretionary mandate. Therefore where Investment Firms transmit orders but do not comply with the conditions for transmission under Article 4 of RTS 22, ESMA would only expect them to report in an 'any other capacity'.

As mentioned in section 5.28, a DEA provider should report as acting in AOTC or MTCH capacity.

5.28 Direct Electronic Access (DEA)

Both the **DEA provider** and the **DEA client**, if it is an Investment Firm, should submit a transaction report (subject to the exception mentioned in variant B).

When transaction reporting, the **DEA provider** should ensure to identify itself as the executing entity (Field 4 "Executing entity identification code"). Since the DEA user (the client) is making the decision on how to execute the DEA Provider should populate the execution within the firm field with 'NORE' as set out in 5.12 ~~and to fill in Field 59 ("Execution within firm") as it is responsible for the execution of the transaction on the Trading Venue: given that the transaction is effected using its membership, the **DEA provider** is the entity facing and visible to the market. However,~~ The **DEA provider** should never fill in Field 57 ("Investment decision within firm") as it is never involved in the investment decision which is the **DEA client's** responsibility. Moreover, the **DEA provider** should report as acting in AOTC or MTCH capacity (Field 29).

In its transaction report, the **DEA client** should identify the **DEA provider** rather than the market as either the buyer (Field 7 - "Buyer identification code") or the seller (Field 16 - "Seller identification code") as applicable. Moreover, it should always populate Field 36 ("Venue") as 'XOFF' as it is not the entity facing the market. However, it is highlighted that where the **DEA client** is acting on behalf of a client and where it has transmitted the details of that client pursuant to the conditions provided under Article 4 of RTS 22, the **DEA client** should not transaction report as all the relevant transaction information will be provided to the competent authority by means of the **DEA provider's** transaction report.

5.28.1 Scenario 1: the DEA client is dealing on own account with no underlying client

Example 80

Investment Firm X (**DEA client**) uses the membership code of Investment Firm Y (**DEA provider**) in order to submit an order on Trading Venue M. The order of Investment Firm X consists in buying financial instruments on Trading Venue M. Within Investment Firm X, Trader 1 has made the investment decision whereas Trader 2 is responsible for submitting the order for execution through the **DEA** facility provided by Investment Firm Y. Trading Venue M generates the Trading venue transaction identification code (TVTIC) as '1234'. ~~Algo123456789 is responsible for the execution.~~

How should Investment Firms X and Y report

N	Field	Values Report #1 Investment Firm Y	Values Report #2 Investment Firm X
3	Trading venue transaction identification code	'1234'	
4	Executing entity identification code	{LEI} of Investment Firm Y	{LEI} of Investment Firm X
7	Buyer identification code	{LEI} of Investment Firm X	{LEI} of Investment Firm X
12	Buyer decision maker code		
16	Seller identification code	{LEI} of CCP for Trading Venue M	{LEI} of Investment Firm Y
21	Seller decision maker code		
25	Transmission of order indicator	'false'	'false'
29	Trading capacity	'AOTC'	'DEAL'
36	Venue	Segment {MIC} of Trading Venue M	'XOFF'
57	Investment decision within firm		{NATIONAL_ID} of Trader 1
59	Execution within firm	'NORE~~ALGO123456789~~'	{NATIONAL_ID} of Trader 2

...

Under this scenario, within Investment Firm X, the trader who makes the investment decision is different from the trader who submits the order for execution. Where only one trader is responsible for both the investment decision and the execution within Investment Firm X, then Fields 57 and 59 of Firm X's reports should both be filled in with the national ID of that trader.

5.28.2 Scenario 2: DEA client is acting on behalf of a client

5.28.2.1 Variant A: no transmission of client details to the **DEA provider**

Example 81

Investment Firm X (**DEA client**) uses the membership code of Investment Firm Y (**DEA provider**) in order to submit an order on Trading Venue M. The order of Investment Firm X consists in buying financial instruments on Trading Venue M. Investment Firm X is acting on behalf of Client 1 whose details are not transmitted to Investment Firm Y. Client 1 has made the investment decision. Within Investment Firm X, Trader 1 is responsible for submitting the order for execution through the **DEA** facility provided by Investment Firm Y. Trading Venue M generates the TVTIC 1234 ~~and algo123456789 is responsible for the execution~~.

How should Investment Firms X and Y report?

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N	Field	Values Report #1 Investment Firm Y	Values Report #1 Investment Firm X
3	Trading venue transaction identification code	'1234'	
4	Executing entity identification code	{LEI} of Investment Firm Y	{LEI} of Investment Firm X
7	Buyer identification code	{LEI} of Investment Firm X	{NATIONAL_ID} of Client 1
12	Buyer decision maker code		
16	Seller identification code	{LEI} of CCP for Trading Venue M	{LEI} of Investment Firm Y
21	Seller decision maker code		
25	Transmission of order indicator	'false'	'true'
29	Trading capacity	'AOTC'	'AOTC'
36	Venue	Segment {MIC} of Trading Venue M	'XOFF'
57	Investment decision within firm		
59	Execution within firm	'NORE'	{NATIONAL_ID} of Trader 1

...

5.28.2.2 Variant B: transmission of client details to the DEA provider

Example 82

Investment Firm X (DEA client) uses the membership code of Investment Firm Y (DEA provider) in order to submit an order on Trading Venue M. The order of Investment Firm X consists in buying financial instruments on Trading Venue M. Investment Firm X is acting on behalf of Client 1 whose details are transmitted to Investment Firm Y pursuant to Article 4 of RTS 22. Trading Venue M generates the TVTIC 1234. ~~and 'algoALGO123456789' is responsible for the execution.~~ Since Investment Firm X is meeting the conditions for transmission under Article 4 of RTS 22 it should not make a transaction report.

How should Investment Firm Y report?

N	Field	Values Report Investment Firm Y	XML representation
3	Trading venue transaction identification code	'1234'	<Tx> <New> ...
4	Executing entity identification code	{LEI} of Investment Firm Y	

7	Buyer identification code	{NATIONAL_ID} of Client 1	<ExctgPty>ABCDEFGHIJKLMNOPQRST</ExctgPty> ... <Buyr> <AcctOwnr> <Prsn> ... <Othr> <Id>FR19620604JEAN#COCTE</Id> <SchmeNm> <Prtry>CONCAT</Prtry> </SchmeNm> </Othr> </Prsn> </Id> </AcctOwnr> </Buyr> <Sellr> <AcctOwnr> <Id> <LEI>11111111111111111111</LEI> </Id> </AcctOwnr> </Sellr> <OrdrTrnsmssn> <TrnsmssnInd>false</TrnsmssnInd> <TrnsmttgBuyr>12345678901234567890</TrnsmttgBuyr> </OrdrTrnsmssn> <Tx> ... <TradgCpcty>AOTC</TradgCpcty> ... <TradVn>XMIC</TradVn> <TradPlcMtchgId>1234</TradPlcMtchgId> </Tx> <ExctgPrsn> <Clnt>NORE</Clnt> ~~<Algo>ALGO123456789</Algo>~~ </ExctgPrsn> ... </New> </Tx>
12	Buyer decision maker code		
16	Seller identification code	{LEI} of CCP for Trading Venue M	
21	Seller decision maker code		
25	Transmission of order indicator	'false'	
26	Transmitting firm identification code for the buyer	{LEI} of Investment Firm X	
29	Trading capacity	'AOTC'	
36	Venue	Segment {MIC} of Trading Venue M	
57	Investment decision within firm		
58	Country of the branch responsible for the person making the investment decision		
59	Execution within firm	'NORE'	
60	Country of the branch supervising the person responsible for the execution		

Extract - Questions and Answers On MiFID II and MiFIR market structures topics - 7 July 2017

Extract - Questions and Answers On MiFID II and MiFIR market structures topics

(ESMA70-872942901-38)

https://www.esma.europa.eu/press-news/esma-news/esma-updates-qas-mifid-ii-transparency-and-market-structure-topics

3. Direct Electronic Access (DEA) and algorithmic trading [Last update: 31/01/2017]

Question 1 [Last update: 19/12/2016]

Does a simple algorithm qualify as algorithmic trading?

Answer 1

Yes. The fact that a person or firm undertakes trading activity by means of an algorithm which includes a small number of processes (e.g. makes quotes that replicate the prices made by a trading venue) does not disqualify the firm running such algorithm from being engaged in algorithmic trading.

Question 2 [Last update: 19/12/2016]

If an investment firm (firm A) merely transmits a client's order for execution to another investment firm (firm B) who uses algorithmic trading, is investment firm A engaged in algorithmic trading?

Answer 2

No. The transmission of an order for execution to another investment firm without performing any algorithmic trading activity is not algorithmic trading.

Question 3 [Last update: 19/12/2016]

Can a functionality be considered as an Automated Order Router (AOR) if it submits the same order to several trading venues? Would that qualify as algorithmic trading?

Answer 3

According to Recital 22 of Commission Delegated Regulation (EU) No XXX/2016, an AOR is characterized by only determining the trading venue or trading venues to which the order has to be sent without changing any other parameter of the order (including modifying the size of the order by "slicing" it into "child" orders). In case the same unmodified order is sent to several trading venues to ensure execution and it is executed in one of these venues, the functionality can also cancel the unexecuted orders in the other venues without qualifying as algorithmic trading.

Question 4 [Last update: 31/01/2017]

Do the references to 'market makers' in MiFID II Article 2(1)(d)(i) and Article 2(1)(j) cover those market makers as defined under MiFID II Article 4(1)(7) or those firms engaged in a market making agreement according to Article 17(4) of MiFID II?

Answer 4

The reference to market makers' in MiFID II Article 2(1)(d)(i) and Article 2(1)(j) covers both firms engaged in a market making agreement according to Article 17(4) of MiFID II and other market makers covered by Article 4(1)(7) of MiFID II.

Question 5 [Last update: 03/04/2017]

How should the identification and authorisation take place for those firms applying a HighFrequency Trading (HFT) technique?

Answer 5

The mechanics of identifying whether a firm is deemed to be applying a HFT technique are detailed in Article 19 of Commission Delegated Regulation (EU) 2017/565. Firms should review their trading activities at least on a monthly basis to self-assess whether an authorisation requirement has been triggered over the course of the period in question. Upon request, trading venues must provide their members, participants or clients with an estimate of the average number of messages per second two weeks after the end of each calendar month. For this purpose, trading venues should only include messages generated by algorithmic trading activity as identified by the member, participant or client.

However, the onus remains on firms to ensure that the estimates provided by the trading venues accurately reflect their actual trading activity (and in particular that it only takes into account proprietary algorithmic trading activity on liquid instruments excluding, in the case of DEA providers, messages sent by DEA clients using the firm's code).

Where a firm engages in HFT (as described above) and is not authorised as an investment firm under MiFID II, the firm is required to immediately seek authorisation as required under Article 2(1)(d)(iii) of MiFID II.

ESMA reminds that any firm engaged in algorithmic trading (including HFT) has to notify this circumstance to the national competent authority of its home Member State and to the national competent authorities of the trading venues at which it engages in algorithmic trading as member or participant.

Question 6 [Last update: 03/04/2017]

Given that the identification of HFT technique takes into account the previous twelve months of trading and that trading venues are only obliged to provide the data under Article 19 of Commission Delegated Regulation (EU) 2017/565 as of 3 January 2018, when the actual identification as high-frequency traders is expected to take place?

Answer 6

Trading venues are only required by Article 19(5) of Commission Delegated Regulation (EU) 2017/565 to provide estimates of the average of messages per second as of 3 January 2018. As a consequence, over 2018 trading venues have to provide the estimates corresponding to the trading activity of their members/participants from 3 January 2018 onwards. Trading venues may only be able to provide those estimates taking into account the previous twelve months of trading activity in the second week of February 2019. Provided that their 2017 records allow them so, trading venues may provide estimates taking into account the previous twelve months before that date.

Extract - Questions and Answers On MiFID II and MiFIR market structures topics - 7 July 2017 (cont.)

As of 3 January 2018, persons engaged in algorithmic trading are responsible for their own self-assessment to determine whether their trading activity meets the characteristics of HFT as set out under Article 4(1)(40) of MiFID II and Article 19 of Commission Delegated Regulation (EU) 2017/565. If it is the case, they should proceed immediately as described in Answer 5. ESMA notes in this respect that the information provided by trading venues are only estimates that need to be refined according to each person's own records of the messages sent.

Question 7 [Last update: 03/04/2017]

Can DEA users be identified as applying a HFT technique?

Answer 7

Yes. As clarified under Recital 20 of Commission Delegated Regulation (EU) 2017/565, DEA users may be classified as HFTs if they meet the conditions set out under Article 4(1)(40) of MiFID II and Article 19 Commission Delegated Regulation (EU) 2017/565.

In order to assess whether a DEA user meets the applicable message thresholds, firms accessing trading venues through DEA may contact their DEA provider which is obliged to record the data relating to the orders submitted, including modifications and cancellations under Article 21(5) of RTS 6 *[footnote 10 Commission Delegated Regulation (EU) 2017/589 of 19 July 2016 supplementing Directive 2014/65/EU of the European Parliament and of the Council with regard to regulatory technical standards specifying the organisational requirements of investment firms engaged in algorithmic trading (OJ L 87, 31.3.2017, p. 417–448)]*

However, the onus remains on investment firms to ensure that the estimates provided by the DEA providers accurately reflect their actual trading activity (and in particular that it only takes into account proprietary trading activity on liquid instruments excluding, in the case of DEA users sub-delegating the DEA provider's code, messages sent by their own DEA clients).

Question 8 [Last update: 03/04/2017]

When would an investment firm using only algorithms which draw human traders' attention to trading opportunities qualify as engaged in algorithmic trading?

Answer 8

The use of algorithms which only serve to inform a trader of a particular investment opportunity is not considered as algorithmic trading, provided that the execution is not algorithmic.

Question 9 [Last update: 03/04/2017]

Does the MiFID II obligation relating to algorithmic trading apply to electronic OTC trading? Are algorithms that provide quotes/orders to customers subject to the requirements set out in MiFID II?

Answer 9

Article 17 of MiFID II covers the trading activity that takes place on a trading venue. Therefore, OTC trading activity, such as the generation of quotes sent bilaterally to clients is not covered by the provisions in Article 17 of MiFID II (and any further requirements thereof).

Question 10 [Last update: 03/04/2017]

Please explain what is meant by Article 17(3) of RTS 6 which requires investment firms to "reconcile" their own electronic logs with information about their outstanding orders and risk exposures as provided by the trading venues to which they send orders, their brokers or DEA providers, their clearing members or CCP, their data providers or other relevant business partners?

Answer 10

The goal of post-trade controls is mainly to enable firms engaged in algorithmic trading to undertake appropriate management of their market and credit risk. To that end, and in order to make sure that post-trade controls are based on reliable information, Article 17(3) of RTS 6 requires investment firms to reconcile their own electronic logs with information about their outstanding orders and risk exposures as provided by external parties. This should be 17 understood as an obligation to compare the trading activity's reports generated by the investment firm itself with reports from other external sources. This should contribute in particular to:

a) Early detection of any discrepancy between the different data sources and mitigation of errors and malfunctions;

b) Accurate calculation of the firm's actual exposure (in particular, where it accesses different multiple trading systems and/or brokers) and the timely generation of adequate alerts before the position and loss limits set out by the firm have been breached.

Question 11 [Last update: 03/04/2017]

Are firms required to store market data in order to fulfil the requirements contained in Article 13(7) of RTS 6 regarding the replay functionality of surveillance systems?

Answer 11

Under Article 13(1) of RTS 6, investment firms engaged in algorithmic trading are obliged to have in place monitoring systems capable of generating operable alerts to indicate potential market abuse. To that end, firms have to take into account not only their own message, order flow and transaction records but also information from other sources (trading venues, brokers, clearing members, CCPs, data providers, relevant business partners and so forth) which constitute not only the input used to generate messages but also the context of the trading activity.

Under Article 13 of RTS 6 there is no obligation to store internally all the information from other sources as long as it is possible to retrieve that information to operate the replay function.

Those operable alerts may lead to the submission to the national competent authority of a Suspicious Transaction or Order Report (STOR) under the Market Abuse Regulation (MAR) *[footnote 11 Regulation (EU) 596/2014 f the European Parliament and of the Council of 16 April 2014 on market abuse (market abuse regulation) and repealing Directive 2003/6/EC of the European Parliament and of the Council and Commission Directives 2003/124/EC, 2003/125/EC and 2004/72/EC (OJ L 173, 12.6.2014, p. 1–61)]*

Extract - Questions and Answers On MiFID II and MiFIR market structures topics - 7 July 2017 (cont.)

In particular, Article 5(3) of Commission Delegated Regulation (EU) 2016/957 *[footnote Commission Delegated Regulation (EU) 2016/957 of 9 March 2016 supplementing Regulation (EU) No 596/2014 of the European Parliament and of the Council with regard to regulatory technical standards for the appropriate arrangements, systems and procedures as well as notification templates to be used for preventing, detecting and reporting abusive practices or suspicious orders or transactions (OJ L 160, 17.6.2016, p. 1–14)]* prescribes that the information submitted as part of a STOR has to be based on facts and analysis, taking into account all information available to them. Additionally, there is an obligation to maintain for a period of five years the information documenting the analysis carried out with regard to orders and transactions that could constitute market abuse which have been examined and the reasons for submitting or not submitting a STOR. That information shall be provided to the competent authority upon request (Article 3(8) of Commission Delegated Regulation (EU) 2016/957).

Question 12 [Last update: 03/04/2017]

Article 20 of Commission Delegated Regulation (EU) 2017/565 further clarifies the definition of direct electronic access as per Article 4(1)(41) of MiFID II by stating that persons shall be considered not capable of electronically transmitting orders relating to a financial instrument directly to a trading venue in accordance with Article 4(1)(41) of MiFID II where that person cannot exercise discretion regarding the exact fraction of a second of order entry and the lifetime of the order within that timeframe. What does "exercise discretion regarding the exact fraction of a second" mean?

Answer 12

One of the benefits of accessing a trading venue by DEA is in the ability of the firm submitting the order to exercise greater control over the timing of order submission. The use of DEA without passing through appropriate control filters of the provider of DEA and those of the trading venue, is not permitted under MiFID II. Such filters add minimal, but a finite amount of delay to the order reaching the matching engine of the trading venue and as such some may preclude the possibility of a firm submitting such an order to exercise discretion regarding the exact fraction of a second.

However, the phrase in question should be construed as whether the DEA user in question is able to exercise discretion regarding the exact fraction of a second in sending an order, not the exact timing of an order reaching the matching engine. *[emphasis added]* This is a natural interpretation given that current network routing technology cannot provide certainty for a message to reach its destination with the precision of "exact fraction of a second".

Question 13 [Last update: 31/05/2017]

What is meant by "continuous" assessment and monitoring of market and credit risk in Article 17(2) of RTS 6 which relates to investment firms' post trade controls?

Answer 13

Article 17(2) of RTS 6 includes as part of the post-trade controls that investment firms engaged in algorithmic trading must have in place the 'continuous assessment and monitoring of market and credit risk of the investment firm in terms of effective exposure'.

Since there is no requirement to operate this continuous assessment in real-time on an ongoing basis, intraday and/or end of day checks as appropriate can be carried out at entity level. However, it is noted that the investment firm must have the capability to calculate in real time if necessary and on the basis of the information that it has: a) its outstanding exposure; 20 b) the outstanding exposure of each of its traders and c) the outstanding exposure of clients (Article 17(3) RTS 6).

ESMA notes that for that purpose, the reconciliation of the firm's own records with those provided by trading venues, clearing members, central counterparties, brokers, DEA providers or any other business partners must be made in real time when those counterparties provide the information in real time.

Question 14 [Last update: 07/07/2017]

Does the format established for the record-keeping obligations of HFT firms established in RTS 6 apply to their non-algorithmic trading desks?

Answer 14

In addition to the general obligation of investment firms to maintain records of all orders and transactions in financial instruments under Article 25 of MiFIR, Article 17(2) of MiFID II establishes the obligation of investment firms engaged in HFT "to store in an approved form accurate and time sequenced records of all its placed orders, including cancellations of orders, executed orders and quotations on trading venues".

For investment firms simultaneously engaging in HFT and non-HFT activities there are two formats that have to be considered:

- The format established in Annex 2 of RTS 6 has to be used to record the messaging activity related to activity using HFT technique. ESMA considers that 'activity using HFT technique' only includes the algorithmic proprietary trading activity of the firm on a trading venue with respect to any liquid instruments (see Article 19 of Commission Delegated Regulation (EU) 2017/565).

With respect of the timestamping of those records (see fields 23 and 24 of table 3 of Annex II of RTS 6), the activity using HFT technique has to be timestamped within 1 microsecond or better (Table 2 of Annex to RTS 25, to which RTS 6 cross-refers).

- Non-HFT activity has to be recorded under the format established by Commission Delegated Regulation (EU) 2017/565. However, nothing prevents these investment firms from using Annex 2 of RTS 6 to record their non-HFT trading activity if their NCA so agrees.

ESMA reminds that all other non-HFT algorithmic trading activity should be timestamped in one millisecond or better as provided for under 'any other trading activity' as specified in Table 2 of the Annex of RTS 25, to which Commission Delegated Regulation (EU) 2017/565 cross-refers.

…

Extract - Questions and Answers On MiFID II and MiFIR market structures topics - 7 July 2017 (cont.)

Question 15 [Last update: 07/07/2017]

Article 2(2) of Commission Delegated Regulation (EU) 2017/582 (RTS 26) requires trading venues to provide tools to ensure pre-execution screening on an order-by-order basis by each clearing member of the limits set and maintained by that clearing member for its client pursuant to RTS 6. Which specific provision of RTS 6 is the reference to limits in Article 2(2) of RTS 26 referring to?

Answer 15

The reference made to RTS 6 in Article 2(2) of RTS 26 is referring to Article 26 of RTS 6.

Question 16 [Last update: 07/07/2017]

Article 2(1) of RTS 26 provides an exemption from pre-trade, order-by-order checking for on venue traded cleared derivatives if certain conditions are met. When this exemption applies to clearing members, does it also exempt clearing members from the requirement under Article 26(2) of RTS 6 to have "appropriate pre-trade and post-trade procedures for managing the risk of breaches of position limits"?

Answer 16

General clearing members and trading venues are not required to subject client orders for cleared derivative transactions on a trading venue to the relevant pre-trade checks required under RTS 26 where the conditions set out in Article 2(1) of RTS 26 are met. However, pursuant to Article 26(2) of RTS 6, they should have other pre-trade procedures to manage the risk of breaches of position limits by their clients, by way of appropriate margining practice and other means.

Question 17 [Last update: 07/07/2017]

Does the 'kill functionality' require having to integrate different systems in-house using a software approach so that a single button can cancel all orders in all asset classes for all house trading and client trading?

Answer 17

The requirement for an investment firm to have a kill functionality pursuant to Article 12 of RTS 6 obliges the firm to have the ability as an emergency measure to immediately pull any or all outstanding orders from any or all trading venues. ESMA considers that effective kill functionality is essential for ensuring adequate risk management and safeguarding of the orderly functioning of the market, given the risks to which algorithmic trading firms are exposed, in particular in situations where an algorithm is not behaving as expected.

In practical terms, this does not create an obligation for all systems connecting the firm to different trading venues to be implemented through a single unified piece of software, in particular when the investment firm comprises different trading systems. The functionality can comprise both procedures and switches that should be adjusted to the characteristics of the systems operated by the investment firm. For instance, when there is a unified system, a button could be set at the highest level of the system, with adequate and gradual procedures so as to limit risks of disorderly markets conditions. In any case, a single decision of the investment firm should be able to result in an immediate withdrawal of all orders or any subset of them.

Question 18 [Last update: 07/07/2017]

Under Article 3(2)(a) of Commission Delegated Regulation (EU) 2017/580 (RTS 24), there is a requirement to flag orders submitted to a trading venue "as part of a market making strategy pursuant to Articles 17 and 48 of [MiFID II]". Should a firm start flagging orders when it decides to submit orders with a view to make markets in a particular instrument, or only when it concludes a formal agreement with the trading venue subsequent to triggering such an obligation under Article 1 of Commission Delegated Regulation (EU) 2017/578 (RTS 8)?

Answer 18

The primary purpose of flagging as required under Article 3(2)(a) of RTS 24 is to enable efficient detection of market manipulation by distinguishing the order flow from an investment firm based on pre-determined terms established by the issuer or the trading venue from the order flow of the investment firm acting at its own discretion (see Recital 6 of RTS 24).

ESMA therefore expects that only those orders submitted to a trading venue as part of a market making strategy subsequent to the conclusion of a market making agreement with the relevant trading venue should be flagged as such in field 8 as designated in Table 2 of the Annex of RTS 24. The same applies to field 3 of Table 3 of Annex II of RTS 6.

Question 19 [Last update: 07/07/2017]

Could trading venues set out different OTRs for different types of market participants (e.g. firms engaged in a market making scheme)?

Answer 19

As clarified by Recital 3 of Commission Delegated Regulation (EU) 2017/566 (RTS 9) trading venues may set the maximum ratio of unexecuted orders to transactions at the level they consider appropriate to prevent excessive volatility in the financial instrument concerned. Nothing prevents trading venues from setting the limits on the basis of the different categories of market participants that operate in their systems. In particular, trading venues may determine a specific limit ratio for members or participants subject to market making obligations under a written agreement (Article 17(2) of MiFID II) or a market making scheme (Article 48(2)(b) of MiFID II).

The ratio limiting the number of unexecuted orders to transactions should be set in compliance with the objective of Article 48 of MiFID II and supported by statistical analysis of the activity of the different categories of members or participants and the liquidity of the instruments in which they operate.

Question 20 [Last update: 07/07/2017]

In terms of the Order to Trade Ratio (OTR), how should a trading venue tackle cases where a market participant has executed no trades after the submission of a high number of orders?

Answer 20

RTS 9 describes the methodology to calculate the actual OTR incurred by each member or participant of a trading venue using a fraction. In case there have been no trades, a strict application of the proposed methodology is not possible since one cannot divide by zero.

Extract - Questions and Answers On MiFID II and MiFIR market structures topics - 7 July 2017 (cont.)

ESMA is of the view that trading venues should consider that the maximum OTR has been breached if the orders submitted without executing one single transaction surpassed the maximum authorised number of orders that can be sent for one transaction being executed. For instance if the maximum OTR set by the trading is 10, members or participants should not sent more than 10 orders without executing one transaction.

Question 21 [Last update: 07/07/2017]

Article 1(2)(d) of RTS 8 establishes that quotes shall be deemed to have competitive prices where they are posted at or within the maximum bid-ask range set by the trading venue. Does this mean that trading venues have to have published maximum bid-ask ranges for all instruments traded on their venues or only for the instruments on which they have a market making scheme in place?

Answer 21

There are two different obligations when an investment firm is pursuing a market making strategy in trading venues allowing or enabling algorithmic trading through their systems:

a) There is a generic obligation, not restricted to specific financial instruments, for trading venues to sign written market making agreements with all investment firms pursuing a market making strategy on their systems (Article 48(2) and Article 17(3) and (4) of MiFID II) when the circumstances described in Article 1(2) of RTS 8 are met; and

b) Trading venues must have market making schemes in place only with respect to the instruments listed in Article 5 of RTS 8.

In order for investment firms to assess whether they are posting competitive prices on a trading venue and may therefore potentially qualify as engaging into a market making strategy, and have to enter into a market making agreement, trading venues enabling or allowing algorithmic trading through their systems must make public a maximum bid-ask range for each financial instrument they made available for trading. ESMA notes that trading venues may group financial instruments when setting the maximum bid-ask spread for these purposes.

Question 22 [Last update: 07/07/2017]

Under which circumstances a trading venue may cancel, vary or correct a transaction?

Answer 22

Trading venues enabling or allowing algorithmic trading through their systems shall be able to cancel or revoke transactions in case of malfunctioning of the trading venue's mechanisms to manage volatility or of the trading system in the context of disorderly trading conditions, according to Article 18 of RTS 7.

However, Article 47(1)(d) of MiFID II also establishes the general organisational requirement for all trading venues "to have transparent and non-discriminatory rules and procedures that provide for fair and orderly trading and establish objective criteria for the efficient execution of orders". Therefore, the rulebook of a trading venue may foresee other exceptional situations in which transactions might be cancelled provided that those situations are transparent and non-discriminatory.

…

5 Multilateral and bilateral systems [Last update: 07/07/2017]

…

Question 4 [Last update: 07/07/2017]

Can a person that is not authorised as an investment firm but meets the requirements of Article 53(3) of MiFID II be a member or participant of a regulated market or an MTF?

Answer 4

Yes. Article 53(3) of MiFID II provides that an entity that is not an investment firm or a credit institution can be a member of a regulated market under certain conditions, this rule being extended to MTFs by Article 19(2) of MiFID II.

ESMA considers that this provision should be read in conjunction with the requirements of Article 2(1). Under this provision, a person falling under any of the categories listed in Article 2(1) would not have to be authorised as an investment firm.

However, pursuant to Article 2(1)(d) (ii) of MiFID II, when a person dealing on own account in financial instruments other than commodity derivatives or emission allowances or derivatives thereof and not providing any other investment services or performing any other investment activities in such instruments is also a member of or a participant in a regulated market or an MTF, it falls under the scope of MiFID II, and should accordingly be authorised as an investment firm unless:

- it is exempted under points (a), (i) and (j); or
- it is a non-financial entity which executes transactions on a trading venue which are objectively measurable as reducing risks directly relating to the commercial activity or treasury financing activity of that non-financial entity or its group.

As a consequence, the reference in Article 53(3) to persons other than investment firms and credit institutions only relates to entities that are exempted from authorisation under Article 2(1), such as insurance companies or collective investment undertakings, as long as their own regulatory framework permits them to do so.

This Q&A does not address the issue of non-EEA firms being a member or participant of an EEA trading venue. *[emphasis added]*

…

Extract – FCA – PS17/5 - Markets in Financial Instruments Directive II Implementation – Policy Statement I, 31st March 2017

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https://www.fca.org.uk/publication/policy/ps17-05.pdf

2. Regulated Markets (RMs)

Introduction

2.1 This chapter is relevant for the operators of UK Regulated Markets (RMs), Recognised Investment Exchanges (RIEs). It may also be of interest to direct and indirect users of RMs such as investment banks, interdealer brokers, high frequency traders and investment managers.

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2.7 Many respondents disagreed how we transposed the provision in Article 48(7) of MiFID II on direct electronic access (DEA) by members or participants of an RIE. Under the proposed REC 2.5.1(10)(a), only investment firms authorised in accordance with MiFID or credit institutions authorised in accordance with the Capital Requirements Directive (CRD) can provide DEA to clients. It was argued that the comparable provision for MTFs under the Market Conduct Sourcebook (MAR) 5.3A.9, allowed certain non-EEA firms to continue to provide DEA to their clients thereby constituting a competitive disadvantage for RIEs.

2.8 Several respondents expressed concerns about our transposition of Article 48(2) of MiFID II into REC 2.5.1(4), which requires an RIE to have written agreements in place with all investment firms pursuing a market making strategy on trading venues operated by it. They argued that the scope of the obligation is broader than that resulting from RTS 8 on market making agreements and market making schemes.

Our response on changes to REC

…

In relation to DEA, REC 2.5.1(10)(a) also reflected the proposed changes to the RRRs by the Treasury at the time of consultation. Now that the Treasury has published revised draft implementing legislation, which changes the RRRs in relation to DEA we have made consequential changes to REC 2.5.1(10)(a), and this is aligned with the revised wording of MAR 5.3A.9 and MAR 5A.5.9 for MTFs and OTFs. This issue is also addressed in Chapter 8.

…

8. Algorithmic and High Frequency Trading (HFT) Requirements

Introduction

8.1 This chapter is of interest to trading venues and investment firms and banks who engage in algorithmic trading, including those who apply a high-frequency algorithmic trading technique.
Systems and controls for algorithmic trading on MTFs and OTFs

8.2 In CP15/43 we proposed amendments to MAR 5 and text in the new MAR 5A, transposing the provisions in Title III of MiFID II that apply high-level systems and controls requirements for algorithmic trading to MTFs and OTFs. More detailed requirements are contained in RTS 7 which we reference in the Handbook.

8.3 The Handbook currently references ESMA's 2012 automated trading guidelines which have been supplanted by RTSs 6 and 7. We will amend the Handbook to remove these references and replace them with a transposed text of, or references to, RTSs 6 and 7.

8.4 In CP15/43 we asked in Q17:

Do you agree with our proposal to add in the rules outlined above to our Handbook? If not, please give reasons why

8.5 All respondents supported our general approach to Handbook implementation. Some provided suggestions to make technical improvements to the proposed rules, to ensure consistency with the MiFID II provisions. Others asked that we clarify further:

provisions concerning trading venues' testing environments and drop copy facilities where more prescriptive requirements around deadline and minimum data relating to order and trade data would be beneficial, ensuring fair and non-discriminatory fee structures by requiring sufficient public transparency whether the market making obligations under MAR 5.3A.5 should apply to liquid instruments only given the difficulty in applying such obligations to illiquid instruments

8.6 Some respondents noted the apparent difference in the way RMs and MTFs/OTFs are treated in relation to the provision of DEA to trading venues based in EEA. In their view, whilst REC Section 2.5.1(10) is aligned with Article 48(7) of MiFID II in permitting only those EEA regulated investment firms and credit institutions to be a DEA provider, the corresponding proposed rules for MTFs (MAR 5.3A9) and OTFs (MAR 5A.5.9) also permit non-EEA investment firms and overseas firms registered in accordance with Article 46 of MiFIR.

Our response on systems and controls for algorithmic trading on MTFs

Based on the feedback received, we have made some technical changes to our proposals. It is not our intention to provide further guidance on the interpretative issues raised by respondents. But we have taken account of the points raised in our work in ESMA on Level 3 Q&A.

We accept that there should be alignment provisions setting out who can provide DEA across different types of trading venue. Since our consultation, the Treasury has published near-final implementing legislation, including DEA provisions for RIEs. We have aligned the provisions in both REC and MAR with the provisions in the Treasury's implementing legislation.

Systems and controls for algorithmic trading by investment firms and for general clearing members

8.7 In CP15/43 we proposed a new section in MAR, MAR 7A, to set out the additional MiFID II requirements which an algorithmic trading firm, a firm providing DEA to a trading venue or a firm acting as a general clearing member must comply with, in addition to the general organisational requirements in Senior Management Arrangements, Systems and Controls (SYSC). As such, the content of the new chapter should be read in conjunction with the SYSC part of the Handbook.

8.8 In CP15/43 Q18-Q22 we asked:

- Do you agree with our proposal to add in the rules outlined above to our Handbook? If not, please give reasons why. Do you agree with our proposal to add a new section to MAR for Algorithmic and HFT firms, DEA providers and general clearing members? If not, please give reasons why

Extract – FCA – PS17/5 - Markets in Financial Instruments Directive II Implementation – Policy Statement I, 31st March (cont.)

- Do you foresee any implementation issues with the content of MAR 7A? If so, please provide examples
- Are you in favour of the reports under MAR 7A.3.7 and MAR 7A.4.5 being submitted to us regularly, as opposed to an ad hoc basis?
- If you are in favour, what will be the advantages of regular reporting as opposed to ad hoc reporting?
- If we were to require regular reporting, what would be the cost to your firm?

8.9 All respondents agreed that our proposal to create a new, dedicated section of the Handbook capturing requirements for algorithmic and HFT firms, DEA providers and general clearing members was preferable to the alternative option of incorporating the relevant standards into SYSC. Respondents felt that this provided a clearer view of the requirements for the firms concerned. Some noted that fine tuning of the regulations in the future would be better managed if the relevant provisions were contained in a standalone chapter of the Handbook, given the rapid developments in the area of algorithmic trading and HFT.

8.10 Respondents asked for clarity on whether the record keeping requirement for HFTs under MAR 7A.3.8 is applicable at user, system or firm level, and consistency across the Handbook for eligible firms offering DEA services to a trading venue.

8.11 Several respondents provided the following examples of issues which arise as a result of the proposed MAR 7A.

- **Market making** – respondents asked for clarity as to whether a market making agreement needs to be concluded with participants on the section of a trading venue operating under a reference price waiver. They thought that obligations under MAR 7A.3.4 and RTS 8 Article 1 may not be applicable to those participants using the section of a trading venue which operates under the reference price waiver, which can execute at the mid-price under MiFIR and hence no 'firm, simultaneous two way quotes' existed.
- **Disorderly trading** – respondents noted that the requirements under MAR 7A.3.2R and MAR 7A.4.2R on pre-trade controls referenced Market Abuse Regulation. They contended that it was impossible to ensure that a trading system could capture order submission in breach of the general prohibitions under the said Regulation, and that such a strict requirement may not reflect the intention of the co-legislators and did not reflect RTS 6 Article 13. They suggested amending the rule to state; 'cannot ordinarily be used for any purpose that is contrary to:'
- **DEA provision for non-EEA firms** – a number of respondents were unsure whether we had accurately copied the provision under Article 18(5) of MiFID II 'an investment firm that provides direct electronic access to a trading venue shall be responsible for ensuring that clients using that service comply with the requirements of this Directive and the rules of the trading venue' into the proposed MAR 7A, as the current draft did not clarify how broadly MiFID II standards should be applied to DEA users, particularly those non-EEA firms that were not otherwise subject to MiFID II obligations.
- **Business continuity arrangements** – a respondent suggested that the proportionality conditions per RTS Article 14(1) would be better reflected by amending MAR 7A.3.3(1) thus 'have in place effective appropriate business continuity arrangements to deal with any failure of its trading systems'.
- **Flagging of algorithms** – a respondent suggested a harmonised approach to implementing flagging of algorithms be adopted, as issues may arise if venues were to implement different logic.
- **Order to Trade Ratio (OTR) monitoring** – a respondent expressed preference for OTR monitoring requirement to be applied at a member level, so as to avoid excessively complex implementation.

8.12 On the question of whether the submission of the reports under MAR 7A.3.7 and MAR 7A.4.5 to us should be done on a regular or on an ad hoc basis, all but one of the 11 respondents clearly stated their preference for the latter.

8.13 In addition, some respondents expressed concerns that if ad hoc reporting were to be introduced, the requirements in MAR 7A.3.7 and MAR 7A.4.5 to provide the relevant information to us "within 14 days from receipt of the request" would not give firms sufficient time in which to provide all the information specified. Consequently, they proposed that the timeframe for providing such information be extended to "within 30 days from receipt of the request".

8.14 In estimating the cost of complying with regular reporting, only one firm was able to provide an estimate of the cost (£500,000 per year). Others noted that unless further clarity is provided with respect to the specific content and periodicity of such reporting, it would not be possible to estimate the additional cost.

Our response on systems and controls for algorithmic trading by investment firms and for general clearing members

We will retain the current proposed structure of including a new specific chapter on algorithmic and HFT firms, DEA providers and general clearing members. We will consider amending the text to clarify the text following some of the technical suggestions made by the respondents.

On the frequency of reporting, if regular reporting is required, there would be additional cost as compared to an ad hoc reporting regime, both in terms of staffing costs and time. Although such cost increase would be dependent on the content and periodicity of such reporting required, in absence of an overriding motive to implement a regular reporting regime, we will maintain the proposed ad hoc reporting regime. Furthermore, we will extend the timeframe for responding to ad-hoc requests to 30 days.

…

Extract – FCA – PS17/14 - Markets in Financial Instruments Directive II Implementation – Policy Statement II, July 2017

https://www.fca.org.uk/publication/policy/ps17-14.pdf

Annex A

Amendments to the Glossary of definitions

In this Annex, underlining indicates new text and striking through indicates deleted text, unless otherwise stated. Part 1: Comes into force on 3 July 2017

Part 2: Comes into force on 3 January 2018

…

Algorithmic Trading

trading in financial instruments which meets the following conditions:

(a) where a computer algorithm automatically determines individual parameters of orders such as whether to initiate the order, the timing, price or quantity of the order or how to manage the order after its submission; and

(b) there is limited or no human intervention; but does not include any system that is only used for the purpose of routing orders to one or more trading venues or the processing of orders involving no determination of any trading parameters or for the confirmation of orders or the post-trade processing of executed transactions. [Note: article 4(1)(39) of MiFID]

…

DEA direct electronic access.

direct electronic access an arrangement where a member or participant or client of a trading venue permits a person to use its trading code so the person can electronically transmit orders relating to a financial instrument directly to the trading venue and includes arrangements which involve the use by a person of the infrastructure of the member or participant or client, or any connecting system provided by the member or participant or client, to transmit the orders (direct market access) and arrangements where such an infrastructure is not used by a person (sponsored access). [Note: article 4(1)(41) of MiFID]

…

third country firm

(in SYSC) either:

(a) a third country investment firm; or

(b) the UK branch of a non-EEA bank.

…

Annex L

Amendments to the Market Conduct sourcebook (MAR)

5 Multilateral trading facilities (MTFs)

…

5.3A Systems and controls for algorithmic trading

Systems and controls

5.3A.1 R A firm must ensure that the systems and controls, including procedures and arrangements, used in the performance of its activities are adequate, effective and appropriate for the scale and nature of its business.

5.3A.2 R MAR 5.3A.1R applies in particular to systems and controls concerning:

(1) the resilience of the firm's trading systems;

(2) its capacity to deal with peak order and message volumes;

(3) the ability to ensure orderly trading under conditions of severe market stress;

(4) the effectiveness of business continuity arrangements to ensure the continuity of the MTF's services if there is any failure of its trading systems, including the testing of the MTF's systems and controls;

(5) the ability to reject orders that exceed predetermined volume and price thresholds or which are clearly erroneous;

(6) the ability to ensure that algorithmic trading systems cannot create or contribute to disorderly trading conditions on the trading venue;

(7) the ability to ensure any disorderly trading conditions which do arise from the use of algorithmic trading systems are capable of being managed, including systems to limit the ratio of unexecuted orders to transactions that may be entered into the MTF's trading system by a member or participant;

(8) the ability to ensure the flow of orders is capable of being slowed down if there is a risk of system capacity being reached;

(9) the ability to limit and enforce the minimum tick size which may be executed on the MTF; and

(10) the requirement for members and participants to carry out appropriate testing of algorithms, including providing environments to facilitate that testing.

[Note: article 48(1),(4) and (6) of MiFID, MiFID RTS 7, MiFID RTS 9, and MiFID RTS 11]

…

Measures to prevent disorderly markets

5.3A.5 R A firm must have the ability to:

(1) temporarily halt or constrain trading on the MTF if there is a significant price movement in a financial instrument on the MTF or a related trading venue during a short period; and

(2) in exceptional cases, cancel, vary or correct any transaction.

[Note: article 48(5) of MiFID]

5.3A.6 R For the purposes of MAR 5.3A.5R and to avoid significant disruptions to the orderliness of trading, a firm must calibrate the parameters for halting trading in a way which takes into account the following:

Extract – FCA – PS17/14 - Markets in Financial Instruments Directive II Implementation – Policy Statement II, July 2017 (cont.)

(1) the liquidity of different asset classes and subclasses;

(2) the nature of the trading venue market model; and

(3) (3) the types of users.

[Note: article 48(5) of MiFID]

5.3A.7 R The firm must report the parameters mentioned in MAR 5.3A.6R to the FCA in writing, by electronic mail to an address for the usual supervisory contact of the firm at the FCA, and obtain an electronic confirmation of receipt.

[Note: article 48(5) of MiFID]

5.3A.8 R A firm must have systems and procedures to notify the FCA if:

(1) an MTF operated by the firm is material in terms of the liquidity of trading of a financial instrument in the EEA; and FCA 2017/xx Page 161 of 323

(2) trading is halted in that instrument.

[Note: article 48(5) of MiFID]

Direct electronic access

5.3A.9 R A firm which permits direct electronic access to an MTF it operates must:

(1) not permit members or participants of the MTF to provide such services unless they are:

(a) investment firms authorised under MiFID; or

(b) CRD credit institutions; or

(c) third country investment firms; or

(d) third country firms providing the direct electronic access in the course of exercising rights under article 46.1 of MiFIR; or

(e) third country firms providing the direct electronic access in the course of exercising rights under article 47.3 of MiFIR; or

(f) third country firms providing the direct electronic access in accordance with the relevant UK national regime for the purposes of article 54.1 (transitional provisions) of MiFIR; or

(g) a third country firm which does not come within MAR 5.3A.9R(1)(d) to (f) but is otherwise permitted to provide the direct electronic access under the Act; or

(h) firms that come within article 2.1(a), (e), (i), or (j) of MiFID and have a Part 4A permission relating to investment services or activities;

(2) set, and apply, criteria for the suitability of persons to whom direct electronic access services may be provided;

(3) ensure that the member or participant of the MTF retains responsibility for adherence to the requirements of MiFID in respect of orders and trades executed using the direct electronic access service;

(4) set standards for risk controls and thresholds on trading through direct electronic access;

(5) be able to distinguish and if necessary stop orders or trading on that trading venue by a person using direct electronic access separately from:

(a) other orders; and

(b) trading by the member or participant providing the direct electronic access; and

(6) have arrangements to suspend or terminate the provision of direct electronic access on that market by a member or participant in the case of any non-compliance with this rule.

[Note: article 48(7) of MiFID]

Co-location

5.3A.10 R Where a firm permits co-location in relation to the MTF, its rules on colocation services must be transparent, fair and non-discriminatory.

[Note: article 48(8) of MiFID and MiFID RTS 10]

…

After the deleted MAR 7 insert the following new chapter. All the text is new and is not underlined.

7A Algorithmic trading

7A.1 Application

Who?

7A.1.1 R This chapter applies to :

(1) a UK MiFID investment firm; and

(2) a third country investment firm, with an establishment in the United Kingdom.

What?

7A.1.2 R This chapter applies to a firm in relation to the following activities:

(1) algorithmic trading (MAR 7A.3);

(2) providing the service of DEA to a trading venue (MAR 7A.4); and

(3) providing the service of acting as a general clearing member for another person (MAR 7A.5).

[Note: this chapter transposes article 17 of MiFID, in respect of the types of firms referred to above. Parts 4 and 5 of the MiFI Regulations set out equivalent requirements in respect of persons exempt under article 2(1)(a), (e), (i) and (j) of MiFID, which are required to comply with article 17(1) to (6) of MiFID due to article 1(5) of MiFID.]

Status of EU provisions as rules in certain instances

7A.1.3 G GEN 2.2.22AR applies to ensure that a third country investment firm should not be treated in a more favourable way than an EEA firm.

Extract – FCA – PS17/14 - Markets in Financial Instruments Directive II Implementation – Policy Statement II, July 2017 (cont.)

7A.2 Purpose

7A.2.1 G The purpose of this chapter is to implement article 17 of MiFID, which imposes requirements on investment firms which are:

(1) engaging in algorithmic trading; or

(2) providing the service of DEA to a trading venue; or

(3) providing the service of acting as a general clearing member for another person. [Note: related requirements imposed under article 48 of MiFID upon trading venues, in respect of members and participants engaging in algorithmic trading and providing the service of DEA, are transposed in REC 2, MAR 5 and MAR 5A]

7A.3 Requirements for algorithmic trading

Application

7A.3.1 R This section applies to a firm which engages in algorithmic trading.

Systems and controls

7A.3.2 R A firm must have in place effective systems and controls, suitable to the business it operates, to ensure that its trading systems:

(1) are resilient and have sufficient capacity;

(2) are subject to appropriate trading thresholds and limits;

(3) prevent the sending of erroneous orders, or the systems otherwise functioning in a way that may create or contribute to a disorderly market; and

(4) cannot be used for any purpose that is contrary to:

  (a) the Market Abuse Regulation; or

  (b) the rules of a trading venue to which it is connected.

[Note: article 17(1) of MiFID and MiFID RTS 6 specifying the organisational requirements of investment firms engaged in algorithmic trading]

7A.3.3 R A firm must:

(1) have in place effective business continuity arrangements to deal with any failure of its trading systems; and

(2) ensure that its systems are fully tested and properly monitored to ensure that it meets the requirements of (1) and of MAR 7A.3.2R.

[Note: article 17(1) of MiFID and MiFID RTS 6 specifying the organisational requirements of investment firms engaged in algorithmic trading]

Market making

7A.3.4 R Where a firm engages in algorithmic trading to pursue a market making strategy, it must:

(1) carry out market making continuously during a specified proportion of the trading venue's trading hours so that it provides liquidity on a regular and predictable basis to that trading venue, except in exceptional circumstances;

(2) enter into a binding written agreement with the trading venue which must specify the requirements for the purpose of (1); and

(3) have in place effective systems and controls to ensure that it meets the obligations under the agreement in (2).

[Note: article 17(3) of MiFID, MiFID RTS 8 specifying the circumstances in which a person would be obliged to enter into the market making agreement referred to in MAR 7A.3.4R(2) and the content of such an agreement, including the specified proportion of the trading venue's trading hours, and the situations constituting exceptional circumstances, referred to in MAR 7A.3.4R(1)]

7A.3.5 R For the purpose of MAR 7A.3.4R, the firm must take into account:

(1) the liquidity, scale and nature of the specific market; and

(2) the characteristics of the instrument traded. [Note: article 17(3) of MiFID]

Notifications

7A.3.6 R A firm which is a member or participant of a trading venue must immediately notify the following if it is engaging in algorithmic trading:

(1) the FCA; and

(2) any competent authority of a trading venue in another EEA State where the firm engages in algorithmic trading.

[Note: article 17(2) of MiFID]

7A.3.7 R A firm must provide the following, at the FCA's request, within 14 days from receipt of the request:

(1) a description of the nature of its algorithmic trading strategies;

(2) details of the trading parameters or limits to which the firm's system is subject;

(3) evidence that MAR 7A.3.2R (systems and controls) and MAR 7A.3.3R (business continuity and system tests) are met;

(4) details of the testing of the firm's systems;

(5) the records in MAR 7A.3.8R(2) (accurate and time-sequenced records of all its placed orders); and

(6) any further information about the firm's algorithmic trading and systems used for that trading.

[Note: article 17(2) of MiFID]

Extract – FCA – PS17/14 - Markets in Financial Instruments Directive II Implementation – Policy Statement II, July 2017 (cont.)

7A.4 Requirements when providing direct electronic access

Application

7A.4.1 R This section applies to a firm which provides the services of DEA to a trading venue.

Systems and controls

7A.4.2 R A firm must have in place systems and controls which:

(1) ensure it conducts an assessment and review of the suitability of clients using the service;

(2) prevent clients using the service from exceeding appropriate pre-set trading and credit thresholds;

(3) prevent trading by clients which:

  (a) may create risks to the firm; or

  (b) may create, or contribute to, a disorderly market; or

  (c) could be contrary to the Market Abuse Regulation or the rules of the trading venue.

[Note: article 17(5) of MiFID]

Client dealings

7A.4.3 R

(1) A firm must monitor the transactions made by clients using the service to identify:

  (a) infringements of the rules of the trading venue; or

  (b) disorderly trading conditions; or

  (c) conduct which may involve market abuse and which is to be reported to the FCA.

(2) A firm must have a binding written agreement with each client which:

  (a) details the essential rights and obligations of both parties arising from the provision of the service; and

  (b) states that the firm is responsible for ensuring the client complies with the requirements of MiFID and the rules of the trading venue.

[Note: article 17(5) of MiFID]

Notifications

7A.4.4 R A firm must immediately notify the following if it is providing DEA services:

(1) the FCA; and

(2) the competent authority of any trading venue in the EEA to which the firm provides DEA services.

[Note: article 17(5) of MiFID and MiFID RTS 6 specifying the organisational requirements of investment firms providing direct electronic access]

7A.4.5 R A firm must provide the following, at the FCA's request, within 14 days from receipt of the request:

(1) a description of the systems mentioned in MAR 7A.4.2R(1);

(2) evidence that those systems have been applied; and

(3) information stored in accordance with MAR 7A.4.6R.

[Note: article 17(5) of MiFID]

Record keeping

7A.4.6 R

A firm must arrange for records to be kept:

(1) on the matters referred to in MAR 7A.4.2R in relation to its systems and controls; and

(2) in order to enable it to meet any requirement imposed on it under MAR 7A.4.5R.

[Note: article 17(5) of MiFID]

7A.5 Requirements when acting as a general clearing member

Application

7A.5.1 R This section applies to a firm which provides the service of acting as a general clearing member.

Requirements

7A.5.2 R A firm must:

(1) have clear criteria as to the suitability requirements of persons to whom clearing services will be provided;

(2) apply those criteria;

(3) impose requirements on the persons to whom clearing services are being provided to reduce risks to the firm and to the market; and

(4) have a binding written agreement with any person to whom it is providing clearing services, detailing the essential rights and obligations of both parties arising from the provision of the services.

[Note: article 17(6) of MiFID and MiFID RTS 6 specifying the organisational requirements of investment firms acting as general clearing members]

Appendix 2

Third Country Equivalence and Exemption Supporting Text

Extract - DIRECTIVE 2014/65/EU OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 15 May 2014 (Establishment of a Branch)

CHAPTER IV

Provision of investment services and activities by third country firms

Section 1

Provision of services or performance of activities through the establishment of a branch

Article 39

Establishment of a branch

1. A Member State may require that a third-country firm intending to provide investment services or perform investment activities with or without any ancillary services to retail clients or to professional clients within the meaning of Section II of Annex II in its territory establish a branch in that Member State.
2. Where a Member State requires that a third-country firm intending to provide investment services or to perform investment activities with or without any ancillary services in its territory establish a branch, the branch shall acquire a prior authorisation by the competent authorities of that Member State in accordance with the following conditions:
   (a) the provision of services for which the third-country firm requests authorisation is subject to authorisation and supervision in the third country where the firm is established and the requesting firm is properly authorised, whereby the competent authority pays due regard to any FATF recommendations in the context of anti-money laundering and countering the financing of terrorism;
   (b) cooperation arrangements, that include provisions regulating the exchange of information for the purpose of preserving the integrity of the market and protecting investors, are in place between the competent authorities in the Member State where the branch is to be established and competent supervisory authorities of the third country where the firm is established;
   (c) sufficient initial capital is at free disposal of the branch;
   (d) one or more persons are appointed to be responsible for the management of the branch and they all comply with the requirement laid down in Article 9(1);
   (e) the third country where the third-country firm is established has signed an agreement with the Member State where the branch is to be established, which fully comply with the standards laid down in Article 26 of the OECD Model Tax Convention on Income and on Capital and ensures an effective exchange of information in tax matters, including, if any, multilateral tax agreements;
   (f) the firm belongs to an investor-compensation scheme authorised or recognised in accordance with Directive 97/9/EC.
3. The third-country firm referred to in paragraph 1 shall submit its application to the competent authority of the Member State where it intends to establish a branch.

Article 40

Obligation to provide information

A third-country firm intending to obtain authorisation for the provision of any investment services or the performance of investment activities with or without any ancillary services in the territory of a Member State through a branch shall provide the competent authority of that Member State with the following:

(a) the name of the authority responsible for its supervision in the third country concerned. When more than one authority is responsible for supervision, the details of the respective areas of competence shall be provided;
(b) all relevant details of the firm (name, legal form, registered office and address, members of the management body, relevant shareholders) and a programme of operations setting out the investment services and/or activities as well as the ancillary services to be provided and the organisational structure of the branch, including a description of any outsourcing to third parties of essential operating functions;
(c) the name of the persons responsible for the management of the branch and the relevant documents to demonstrate compliance with requirements laid down in Article 9(1);
(d) information about the initial capital at free disposal of the branch.

Article 41

Granting of the authorisation

1. The competent authority of the Member State where the third-country firm has established or intends to establish its branch shall only grant authorisation when the competent authority is satisfied that:
   (a) the conditions under Article 39 are fulfilled; and
   (b) the branch of the third-country firm will be able to comply with the provisions referred to in paragraph 2.

   The competent authority shall inform the third-country firm, within six months of submission of a complete application, whether or not the authorisation has been granted.
2. The branch of the third-country firm authorised in accordance with paragraph 1, shall comply with the obligations laid down in Articles 16 to 20, 23, 24, 25 and 27, Article 28(1), and Articles 30, 31 and 32 of this Directive and in Articles 3 to 26 of Regulation (EU) No 600/2014 and the measures adopted pursuant thereto and shall be subject to the supervision of the competent authority in the Member State where the authorisation was granted.

Member States shall not impose any additional requirements on the organisation and operation of the branch in respect of the matters covered by this Directive and shall not treat any branch of third-country firms more favourably than Union firms.

Article 42

Provision of services at the exclusive initiative of the client

Member States shall ensure that where a retail client or professional client within the meaning of Section II of Annex II established or situated in the Union initiates at its own exclusive initiative the provision of an investment service or activity by a third-country firm, the requirement for authorisation under Article 39 shall not apply to the provision of that service or activity by the third country firm to that person including a relationship specifically relating to the provision of that service or activity. An initiative by such clients shall not entitle the third-country firm to market otherwise than through the branch, where one is required in accordance with national law, new categories of investment products or investment services to that client.

Extracts – ESMA – Supervisory Convergence Work Programme 2017 & MIFIR - REGULATION (EU) No 600/2014 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 15 May 2014

https://www.esma.europa.eu/sites/default/files/library/esma42-397158525-448_supervisory_convergence_work_programme_2017_0.pdf

Supervisory Convergence

Work Programme 2017

…

6.4 Third-Country Issues

78. Recognising the diversity of applicable third country provisions under different EU legislative texts and the lack of an equivalence regime in some of them, there is scope for clarifying the applicable legal framework and ensuring consistent supervisory approaches at an EU level. As such, ESMA will engage further in the work relating to third country provisions under different legislative texts.

79. Additional work will likely be required regarding third countries for several areas of MiFID and MiFIR. In the AIFMD context, ESMA is awaiting (further to the advice it provided in 2016) the Commission's decision on the extension of the EU passport to certain third countries.

80. ESMA will also facilitate and coordinate the implementation of relevant aspects of the General Data Protection Regulation which may have an impact on the cooperation between EU NCAs and third country authorities. ESMA will help ensure the consistent and continued ability of NCAs to cooperate with international counterparts and prevent a negative impact on important cross-border regulatory work with third countries.

…

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http://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32014R0600&qid=1468437310913&from=EN

REGULATION (EU) No 600/2014 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 15 May 2014

…

TITLE VIII

PROVISION OF SERVICES AND PERFORMANCE OF ACTIVITIES BY THIRD-COUNTRY FIRMS FOLLOWING AN EQUIVALENCE DECISION WITH OR WITHOUT A BRANCH

Article 46 General provisions

1. A third-country firm may provide investment services or perform investment activities with or without any ancillary services to eligible counterparties and to professional clients within the meaning of Section I of Annex II to Directive 2014/65/EU established throughout the Union without the establishment of a branch where it is registered in the register of third-country firms kept by ESMA in accordance with Article 47.

2. ESMA shall register a third-country firm that has applied for the provision of investment services or performance of activities throughout the Union in accordance with paragraph 1 only where the following conditions are met:

   (a) the Commission has adopted a decision in accordance with Article 47(1);

   (b) the firm is authorised in the jurisdiction where its head office is established to provide the investment services or activities to be provided in the Union and it is subject to effective supervision and enforcement ensuring a full compliance with the requirements applicable in that third country;

   (c) cooperation arrangements have been established pursuant to Article 47(2).

3. Where a third-country firm is registered in accordance with this Article, Member States shall not impose any additional requirements on the third-country firm in respect of matters covered by this Regulation or by Directive 2014/65/EU and shall not treat third-country firms more favourably than Union firms.

4. The third-country firm referred to in paragraph 1 shall submit its application to ESMA after the adoption by the Commission of the decision referred to in Article 47 determining that the legal and supervisory framework of the third country in which the third-country firm is authorised is equivalent to the requirements described in Article 47(1).

   The applicant third-country firm shall provide ESMA with all information necessary for its registration. Within 30 working days of receipt of the application, ESMA shall assess whether the application is complete. If the application is not complete, ESMA shall set a deadline by which the applicant third-country firm is to provide additional information. The registration decision shall be based on the conditions set out in paragraph 2.

   Within 180 working days of the submission of a complete application, ESMA shall inform the applicant third-country firm in writing with a fully reasoned explanation whether the registration has been granted or refused.

   Member States may allow third-country firms to provide investment services or perform investment activities together with ancillary services to eligible counterparties and professional clients within the meaning of Section I of Annex II to Directive 2014/65/EU in their territories in accordance with national regimes in the absence of the Commission decision in accordance with Article 47(1) or where such decision is no longer in effect.

5. Third-country firms providing services in accordance with this Article shall inform clients established in the Union, before the provision of any investment services, that they are not allowed to provide services to clients other than eligible counterparties and professional clients within the meaning of Section I of Annex II to Directive 2014/65/EU and that they are not subject to supervision in the Union. They shall indicate the name and the address of the competent authority responsible for supervision in the third country.

   The information in the first subparagraph shall be provided in writing and in a prominent way.

   Member States shall ensure that where an eligible counterparty or professional client within the meaning of Section I of Annex II to Directive 2014/65/EU established or situated in the Union initiates at its own exclusive initiative the provision of an investment service or activity by a third-country firm, this Article does not apply to the provision of that service or activity by the third-country firm to that person including a relationship specifically related to the provision of that service or activity. An initiative by such clients shall not entitle the third-country firm to market new categories of investment product or investment service to that individual.

Extract - MIFIR - REGULATION (EU) No 600/2014 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 15 May 2014 (cont.)

6. Third-country firms providing services or performing activities in accordance with this Article shall, before providing any service or performing any activity in relation to a client established in the Union, offer to submit any disputes relating to those services or activities to the jurisdiction of a court or arbitral tribunal in a Member State.

7. ESMA shall develop draft regulatory technical standards to specify the information that the applicant third-country firm shall provide to ESMA in its application for registration in accordance with paragraph 4 and the format of information to be provided in accordance with paragraph 5.

ESMA shall submit those draft regulatory technical standards to the Commission by 3 July 2015.

Power is delegated to the Commission to adopt the regulatory technical standards referred to in the first subparagraph in accordance with Articles 10 to 14 of Regulation (EU) No 1095/2010.

Article 47 Equivalence decision

1. The Commission may adopt a decision in accordance with the examination procedure referred to in Article 51(2) in relation to a third country stating that the legal and supervisory arrangements of that third country ensure that firms authorised in that third country comply with legally binding prudential and business conduct requirements which have equivalent effect to the requirements set out in this Regulation, in Directive 2013/36/EU and in Directive 2014/65/EU and in the implementing measures adopted under this Regulation and under those Directives and that the legal framework of that third country provides for an effective equivalent system for the recognition of investment firms authorised under third-country legal regimes.

   The prudential and business conduct framework of a third country may be considered to have equivalent effect where that framework fulfils all the following conditions:

   (a) firms providing investment services and activities in that third country are subject to authorisation and to effective supervision and enforcement on an ongoing basis;

   (b) firms providing investment services and activities in that third country are subject to sufficient capital requirements and appropriate requirements applicable to shareholders and members of their management body;

   (c) firms providing investment services and activities are subject to adequate organisational requirements in the area of internal control functions;

   (d) firms providing investment services and activities are subject to appropriate conduct of business rules;

   (e) it ensures market transparency and integrity by preventing market abuse in the form of insider dealing and market manipulation

2. ESMA shall establish cooperation arrangements with the relevant competent authorities of third countries whose legal and supervisory frameworks have been recognised as effectively equivalent in accordance with paragraph 1. Such arrangements shall specify at least:

   (a) the mechanism for the exchange of information between ESMA and the competent authorities of third countries concerned, including access to all information regarding the non-Union firms authorised in third countries that is requested by ESMA;

   (b) the mechanism for prompt notification to ESMA where a third-country competent authority deems that a third country firm that it is supervising and ESMA has registered in the register provided for in Article 48 infringes the conditions of its authorisation or other law to which it is obliged to adhere;

   (c) (c) the procedures concerning the coordination of supervisory activities including, where appropriate, on-site inspections.

3. A third-country firm established in a country whose legal and supervisory framework has been recognised to be effectively equivalent in accordance with paragraph 1 and is authorised in accordance with Article 39 of Directive 2014/65/EU shall be able to provide the services and activities covered under the authorisation to eligible counterparties and professional clients within the meaning of Section I of Annex II to Directive 2014/65/EU in other Member States of the Union without the establishment of new branches. For that purpose, it shall comply with the information requirements for the cross-border provision of services and activities in Article 34 of Directive 2014/65/EU. The branch shall remain subject to the supervision of the Member State where the branch is established in accordance with Article 39 of Directive 2014/65/EU. However, and without prejudice to the obligations to cooperate laid down in Directive 2014/65/EU, the competent authority of the Member State where the branch is established and the competent authority of the host Member State may establish proportionate cooperation agreements in order to ensure that the branch of the third-country firm providing investment services within the Union delivers the appropriate level of investor protection.

4. A third-country firm may no longer use the rights under Article 46(1) where the Commission adopts a decision in accordance with the examination procedure referred to in Article 51(2) withdrawing its decision under paragraph 1 of this Article in relation to that third country.

Article 48 Register

ESMA shall keep a register of the third-country firms allowed to provide investment services or perform investment activities in the Union in accordance with Article 46. The register shall be publicly accessible on the website of ESMA and shall contain information on the services or activities which the third-country firms are permitted to provide or perform and the reference of the competent authority responsible for their supervision in the third country.

…

Extract – RTS 46 - Commission Delegated Regulation (EU) 2016/2022 of 14 July 2016

http://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32016R2022&from=EN

COMMISSION DELEGATED REGULATION (EU) 2016/2022 of 14 July 2016 supplementing Regulation (EU) No 600/2014 of the European Parliament and of the Council with regard to regulatory technical standards concerning the information for registration of third country firms and the format of information to be provided to the clients

(Text with EEA relevance)

THE EUROPEAN COMMISSION, Having regard to the Treaty on the Functioning of the European Union, Having regard to Regulation (EU) No 600/2014 of the European Parliament and of the Council of 15 May 2014 on markets in financial instruments and amending Regulation (EU) No 648/2012 (1), and in particular Article 46(7) thereof, Whereas:

(1) Regulation (EU) No 600/2014 sets out a harmonised framework for the treatment of third-country firms accessing the Union to provide investment services and activities to eligible counterparties and to professional clients.

(2) It is appropriate to set out the information that a third-country firm applying for the provision of investment services or performance of activities throughout the Union should provide to the European Securities and Markets Authority (ESMA) and the format in which the information to clients as referred to in Article 46(5) of Regulation (EU) No 600/2014 should be provided in order to establish uniform requirements relating to third country firms and to benefit from the possibility to provide services throughout the Union.

(3) In order to enable ESMA to correctly identify and register the third-country firms, ESMA should be provided with their contact details, their national and international identification codes and proof of their authorisation to provide investment services in the country where the firm is established.

(4) Attention should be paid to the language and layout used to provide information to clients by third-country firms, in order to ensure that the information is understandable and clear.

(5) The application of this Regulation should be deferred in order to be aligned with the date of application of Regulation (EU) No 600/2014.

(6) This Regulation is based on the draft regulatory technical standards submitted by ESMA to the Commission.

(7) ESMA has conducted open public consultations on the draft regulatory technical standards on which this Regulation is based, analysed the potential related costs and benefits and requested the opinion of the Securities and Markets Stakeholder Group established in accordance with Article 37 of Regulation (EU) No 1095/2010 of the European Parliament and of the Council (2),

HAS ADOPTED THIS REGULATION:

Article 1 Information necessary for the registration

A third-country firm applying for the provision of investment services or performance of activities throughout the Union in accordance with the second subparagraph of Article 46(4) of Regulation (EU) No 600/2014 shall submit the following information to ESMA:

(a) full name of the firm, including its legal name and any other trading name to be used by the firm;

(b) contact details of the firm, including the head office address, telephone number and email address;

(c) contact details of the person in charge of the application, including telephone number and email address;

(d) website, where available;

(e) national identification number of the firm, where available;

(f) legal entity identifier (LEI) of the firm, where available;

(g) Business Identifier Code (BIC) of the firm, where available;

(h) name and address of the competent authority of the third country that is responsible for the supervision of the firm; where more than one authority is responsible for supervision, the details of the respective areas of competence shall be provided;

(i) the link to the register of each competent authority of the third country, where available;

(j) information on which investment services, activities, and ancillary services it is authorised to provide in the country where the firm is established;

(k) the investment services to be provided and activities to be performed in the Union, together with any ancillary services.

Article 2 Information submission requirements

1. The third-country firm shall inform ESMA, within 30 days, of any change of the information provided under Article 1(a) to (g), (j) and (k).
2. Information provided to ESMA under Article 1(j) shall be provided through a written declaration issued by a competent authority of the third country.
3. The information provided to ESMA under Article 1 shall be in English, using the Latin alphabet. Any accompanying documents provided to ESMA under Article 1 and in paragraph 2 of this Article shall be in English or, where they have been written in a different language, a certified English translation shall also be provided.

Article 3 Information concerning type of clients in the Union

1. A third-country firm shall provide the information referred to in Article 46(5) of Regulation (EU) No 600/2014 to the clients in a durable medium.
2. The information referred to in Article 46(5) of Regulation (EU) No 600/2014, shall be:
   (a) provided in English or in the official language, or one of the official languages, of the Member State where the services are to be provided;
   (b) presented and laid out in a way that is easy to read, using characters of readable size;
   (c) without using colours that may diminish the comprehensibility of the information.

Article 4 Entry into force and application

This Regulation shall enter into force on the twentieth day following that of its publication in the Official Journal of the European Union. It shall apply from the date referred to in the second paragraph of Article 55 of Regulation (EU) No 600/2014.

Extract – AFM - Information for Professionals – Digital Portal 15/5/2017

http://www.digitaal.loket.afm.nl/en-US/Diensten/mifid-2/Pages/vergunningaanvraag-bo-mifid2.aspx?tab=1

Digital portal > Services > MiFID II > License application investment firm MiFID II © AFM

License application investment firm MiFID II

In order to be able to provide an investment services or perform investment activities in the Netherlands, you must apply for a licence from the AFM. At the tab 'Apply' you can read how you apply for a licence.

Investment firms with their registered office in Australia, the United States or Switzerland should use the exemption form also listed in the digital portal. This is a national regime for the Netherlands only (no passports available).

Investment firms with their registered office in other non member states need to obtain a licence in the Netherlands and can use this form. This is also a national regime for the Netherlands only (no passports available).

Examples of activities that are new to licensing under MiFID II: Dealing on own account in financial instruments other than commodity derivatives, emission allowances or derivatives thereof by:

a. market makers in derivatives
b. use of direct electronic access of a trading venue or membership of an MTF or regulated market
c. applying a high frequency algorithmic trading technique
d. deal on own account when executing client orders.

Operation of an OTF

Dealing on own account in commodity derivatives or emission allowances or derivatives thereof that are not exempt due to Article 2, section 1, subsection j MiFID II Providing investment services in emission allowances or derivatives thereof.

More information about MiFID II

The AFM deals with an application in 13 weeks. However when additional information is needed, this suspends the time frame. You can apply for a MiFID II licence from as of 1 April 2017. The AFM closely monitors the number of applications and aims to deal with the applications before MiFID II is transposed into national law at 3 January 2018. Therefore we request MiFID II licenses to be submitted as complete and as early as possible.

The AFM charges €5.500 per application. Also a fee is required per person that needs to be assessed by the AFM, of €1.500 per suitability test and €1.000 per integrity test. If the persons have already been tested before by the AFM in similar function, the AFM charges €200 for the suitability test update and €200 for the integrity test update.

It is possible that you also have to apply for declarations of no objections (DNO), which will be assessed by the Dutch Central Bank (DNB). More information on the application process regarding DNO is available at www.dnb.nl.

The AFM aims to process your licence application as soon as possible. The assessment of the application and all annexes takes time. A complete and clear application makes it possible for us to process your application faster. We advise you to read form and guide for application for a MiFID II licence.

Forms

For a licence application you will likely need to send in the following forms and declarations:
Licence application form MiFID II

Notification form prospective appointment

Integrity screening form Suitability matrix

Bankers Oath (example).

You can send the forms from 1 April 2017 to aanvragenmifid2@afm.nl. You will receive a confirmation of receipt. After a licence has been issued, you will be informed and you will be added to our register of licensed investment firms.

…

http://www.digitaal.loket.afm.nl/en-US/Diensten/Beleggingsondernemingen/Melding/Pages/aanmeldingbeleggingsonderneming-artikel10.aspx?tab=1 1/1

Digital portal > Services > Investment firms > Notification and registration > Application investment firm section 10 @ AFM

Investment firms with their registered office in Australia, the United States or Switzerland are exempt from the requirement to obtain a license in the Netherlands.

However to offer investment services in the Netherlands a registration is required.

To be registered it is required that:

- the provision of the investment services is subject to supervision by a supervisory body in the country of the firm's registered office;
- a certificate of supervised status from the supervisory body is submitted to the AFM prior to the provision of investment services in the Netherlands.

License application investment firm

Investment firms with their registered office in other countries than Australia, the United States or Switzerland need to obtain a license in the Netherlands. Therefore we refer you to 'License application investment firm'.

To offer investment services in the Netherlands a registration is required. To be registered it is required that:

- the provision of the investment services is subject to supervision by a supervisory body in the country of the firm's registered office;
- a certificate of supervised status from the supervisory body is submitted to the AFM prior to the provision of investment services in the Netherlands.

The AFM charges €1,500 for this application.

Extract – AMF - GENERAL REGULATION OF THE AUTORITÉ DES MARCHÉS FINANCIERS – Official Journal 10 May 2017

http://www.amf-france.org/en_US/Reglementation/Reglement-general-et-instructions/Archives-du-reglement-general/Reglement-general.html?rgId=rg_courant&year=2009&currentLivreRG=5&category=Book+V+-+Market+infrastructures

Only the French version is binding

The AMF General Regulation is available in English on the English version of the website. The translation is provided for information only and the French version alone is binding.

BOOK V - MARKET INFRASTRUCTURES

TITLE I - REGULATED MARKETS AND MARKET OPERATORS

CHAPTER III - MEMBERS OF REGULATED MARKETS

Article 513-1

The rules of the regulated market governing the admission of market members shall stipulate their obligations under :

1° the constitution and administration of the market operator;

2° rules relating to transactions on the market;

3° the professional requirements for the staff of investment services providers that are market members;

4° the conditions referred to in Article L. 421-18 of the Monetary and Financial Code applicable to members other than investment services providers. These conditions establish, inter alia, the minimum capital or equivalent resources or guarantees required of these members for each regulated market;

5° rules and arrangements for the clearing and settlement of transactions effected on the regulated market.

Article 513-2

The market operator shall ensure that the market member is authorised for the investment services it intends to provide on the regulated market, where such is the case. Where the market rules provide for several categories of member, they shall stipulate the membership requirements for each category.

Article 513-3

Where a market member is based outside a State party to the European Economic Area agreement, admission is conditional on there being a cooperation and information sharing agreement between the AMF and the competent authority in the member's home country. Notwithstanding the first paragraph, the market operator may enter into agreements with recognised markets, within the meaning of Article L. 423-1 of the Monetary and Financial Code and decree 90-948 of 25 October 1990, whereby the members of one market are recognised as members of the other market, and vice versa.

Article 513-4

The market operator shall provide the AMF with a list of members of the regulated market it manages, stipulating their home country. It shall promptly inform the AMF of any changes to the list.

Article 513-5

The market operator shall ensure that members comply with the rules governing the market. The market operator shall conclude an agreement with each member whereby the member agrees to:

1° comply with market rules on a continuous basis;

2° reply to any requests for information from the market operator;

3° submit to on-site inspections by the market operator;

4° rectify, at the behest of the market operator, any situation in which it no longer meets the membership requirements.

Article 513-6

Members of the regulated market shall enforce the obligations set forth in Section 6, Chapter IV, Title I of Book III when executing orders on a regulated market on behalf of their clients.

Article 513-7

The market rules may authorise a market member to outsource trading operations to another member. In such an event, outsourcing in no way alters the market member's responsibilities to its clients.

Article 513-8

The market operator shall specify how it ensures, directly or indirectly, the availability of the necessary training for natural persons who are to become traders of financial instruments on its market.

Article 513-9

For transactions effected on the regulated market it manages, a market operator can oppose its members' choice of a financial instrument settlement and delivery system other than the one it proposes, in the following circumstances:

1° where the arrangements and links between this settlement and delivery system and any other system or infrastructure needed for efficient and cost-effective transaction settlement are not in place;

2° where the AMF considers that the technical conditions for settling transactions effected on this regulated market by a settlement and delivery system other than the one proposed by the market operator would not permit the financial markets to function in a smooth and orderly manner.

Extract – MEFF note on Third Country Access and Consolidated Text of Spanish Securities Market Act, Updated May 2012 (Translation by CNMV)

MEFF's working assumptions around Spanish interpretation of MiFID Article 39.

(Relevant for PTFs that have a US entity membership on this exchange):

MEFF points to Article 59.3 of the Spanish Securities Market Law:
http://www.cnmv.es/docportal/legislacion/leymercado/LMV_May2012_EN.pdf

On this basis, the exchange takes the position that third country members are permissible on futures exchanges, so long that business is proprietary only.

Furthermore, the exchange takes the position that Article 39 of MiFID is not applicable to prop firms. Due to grammatical ambiguity, a Member State *__could__* interpret this as such, though clearly other Member States are taking a different view.

Additionally, through BME Clear, we received the following information:

With regards to how third countries firms can be members of Spanish exchanges, article 69.1.f of the Securities Market Law sets out the following:

Those other persons who, in the opinion of the exchange will take into account in particular the special functions of the market that could be attended by them:

are suitable,

have a sufficient level of competence and competence in the negotiation,

have, where appropriate, appropriate organizational measures, and

have sufficient resources for the function to be performed, taking into account the various financial mechanisms that the official secondary market may have established to ensure the correct settlement of trades.

But specifically article 66.2 is very open to any firm for futures and options exchange provided they trade just for their account:

They may also have access membership, with a restricted capacity exclusively for the negotiation, either for their own account or on behalf of entities of their group, those entities whose main corporate purpose is to invest in organized markets and meet the conditions of resources and solvency established by the exchange regulations referred to in Article 68.

BME Clear does not expect the CNMV to take any lead to change the above norms.

TITLE IV OFFICIAL SECONDARY MARKETS IN SECURITIES

CHAPTER I GENERAL PROVISIONS

Article 37. Members of the official secondary markets

1. Attainment of the status of member of an official secondary market shall be governed by:

a) the general rules established in this Act;

b) the specific rules of each market established in this Act and their secondary legislation or, in the case of markets subject to regional governments, by the rules established by Autonomous Communities with powers in this area, provided that they conform to the provisions of this Title; and

c) the conditions of access established by each market, which must in any event be transparent, non-discriminatory and objective.

2. The following may become members of official secondary markets:

a) Investment firms that are authorised to execute client orders or trade for their own account.

b) Spanish credit institutions.

c) Investment firms and credit institutions authorised in other Member States of the European Union that are authorised to execute client orders or trade for their own account. Membership may be attained by any of the following mechanisms: 1. Directly, by establishing branches in Spain in accordance with article 71.bis of Title V, in the case of investment firms, or in accordance with Chapter II of Title V of Act 26/1988, of 29 July, on Discipline and Intervention of Credit Institutions, in the case of credit institutions. 2. By becoming remote members of the official secondary market without having to be established in the Spanish State, where the trading procedures or systems of the market in question do not require a physical presence for conclusion of transactions.

d) Investment firms and credit institutions authorised in a country that is not a Member State of the European Union provided that, in addition to complying with the requirements laid down in Title V of this Act for operating in Spain, the authorisation given by the authorities in the home country enables them to execute client orders or trade for their own account. The Minister of Economy and Finance may deny those entities access to Spanish markets or impose conditions upon access, for prudential reasons, where Spanish entities are not given equivalent treatment in the home country or where compliance with the rules of order and discipline in the Spanish securities markets is not guaranteed.

…

CHAPTER IV OFFICIAL SECONDARY MARKETS IN FUTURES AND OPTIONS REPRESENTED BY BOOK ENTRIES

Article 59. Official Secondary Markets in Futures and Options.

…

3. The entities envisaged in Article 37 of this Act may be members of these markets.

…

Extract – FCA - The Financial Services and Markets Act 2000 (Regulated Activities) Order 2001

http://www.legislation.gov.uk/uksi/2001/544/pdfs/uksi_20010544_en.pdf

2001 No. 544 FINANCIAL SERVICES AND MARKETS The Financial Services and Markets Act 2000 (Regulated Activities) Order 2001

Overseas persons

72.—

(1) An overseas person does not carry on an activity of the kind specified by **article 14** by—

(a) entering into a transaction as principal with or though an authorised person, or an exempt person acting in the course of a business comprising a regulated activity in relation to which he is exempt; or

(b) entering into a transaction as principal with a person in the United Kingdom, if the transaction is the result of a legitimate approach.

(2) An overseas person does not carry on an activity of the kind specified by **article 21** by—

(a) entering into a transaction as agent for any person with or through an authorised person or an exempt person acting in the course of a business comprising a regulated activity in relation to which he is exempt; or

(b) entering into a transaction with another party ("X") as agent for any person ("Y"), other than with or through an authorised person or such an exempt person, unless—

(i) either X or Y is in the United Kingdom; and

(ii) the transaction is the result of an approach (other than a legitimate approach) made by or on behalf of, or to, whichever of X or Y is in the United Kingdom.

(3) There are excluded from **article 25(1)** arrangements made by an overseas person with an authorised person, or an exempt person acting in the course of a business comprising a regulated activity in relation to which he is exempt.

(4) There are excluded from **article 25(2**) arrangements made by an overseas person with a view to transactions which are, as respects transactions in the United Kingdom, confined to—

(a) transactions entered into by authorised persons as principal or agent; and

(b) transactions entered into by exempt persons, as principal or agent, in the course of business comprising regulated activities in relation to which they are exempt.

(5) There is excluded from article 53 the giving of advice by an overseas person as a result of a legitimate approach.

(6) There is excluded from article 64 any agreement made by an overseas person to carry on an activity of the kind specified by article 25(1) or (2), 37, 40 or 45 if the agreement is the result of a legitimate approach.

(7) In this article, "legitimate approach" means—

(a) an approach made to the overseas person which has not been solicited by him in any way, or has been solicited by him in a way which does not contravene section 21 of the Act; or

(b) an approach made by or on behalf of the overseas person in a way which does not contravene that section.

Additional References:

…

Chapter IV Dealing in Investments as Principal

The activity

Dealing in investments as principal

14. Buying, selling, subscribing for or underwriting securities or contractually based investments (other than investments of the kind specified by article 87, or article 89 so far as relevant to that article) as principal is a specified kind of activity.

…

Chapter V Dealing in Investments as Agent

The activity

Dealing in investments as agent

21. Buying, selling, subscribing for or underwriting securities or contractually based investments (other than investments of the kind specified by article 87, or article 89 so far as relevant to that article) as agent is a specified kind of activity.

…

Chapter VI Arranging Deals in Investments

The activities

Arranging deals in investments

25.—

(1) Making arrangements for another person (whether as principal or agent) to buy, sell, subscribe for or underwrite a particular investment which is—

(a) a security,

(b) a contractually based investment, or

(c) an investment of the kind specified by article 86, or article 89 so far as relevant to that article, is a specified kind of activity.

(2) Making arrangements with a view to a person who participates in the arrangements buying, selling, subscribing for or underwriting investments falling within paragraph (1)(a), (b) or (c) (whether as principal or agent) is also a specified kind of activity.

…

Extract – Norton Rose Fulbright - Commentary on German 3rd Country Equivalence – 28 March 2017

We are aware of much discussion amongst members, proprietary trading firms established in third countries and various service providers regarding the Second Financial Markets Modernisation Act proposal [18/10936 - link] – the proposed amendments to various Germen federal legal instruments including the *Kreditwesengesetz* (Banking Act) and the *Wertpapierhandelsgesetz* (Securities Trading Act) to transpose Directive 2014/65/EU on markets in financial instruments (MiFID II). We have summarised below in 1-8 what we know, what we do not know and what we think re: the provisions of this draft legislation and its implications for proprietary trading firms established in third countries that wish to engage in activities regulated under MiFID II in Germany.

1. The legislative proposal was published on 23 January. It is currently before the Bundestag and must be formally adopted by 03 July. Most provisions in the legislation would apply from 03 January 2018.
2. A new § 64v KWG titled "Transitional provisions for the Second Financial Markets Modernisation Act" sets out four derogations to MiFID II authorisation requirements (pp.140-141 of the proposal).
3. Paragraph (4) of this provision states that persons established in a third country that exclusively deal on own account in financial instruments and do not provide investment services to others may avail of the exemption set out in a new paragraph (5) to § 2 KWG pending ESMA's registration of that person per Article 48 MiFIR and upon receipt of a completed application for registration and following a decision of the European Commission in respect the legal and supervisory arrangements of the third country per Article 47(1) MiFIR.
4. § 64v(4) refers to "für eigene Rechnung nach § 1 Absatz 1a Satz 3". While the cross-reference appears incorrect, the term is quite clearly a translation of the MiFID II Annex I Section A(3) investment activity of dealing on own account and is used accordingly in provisions throughout the draft legislation.
5. The new paragraph (5) to § 2 KWG would permit BaFin (as the "Bundesanstalt") to exempt from authorisation third country persons that engage in investment activities in Germany or provide investment services in Germany for which authorisation is required on the condition that the third country person is subject to equivalent supervision in its home jurisdiction such that additional BaFin supervision may be considered unnecessary (p. 129 of the proposal).
6. We note that there is no time limit on this exemption but assume that a third country person can only avail of the exemption so long as the European Commission has no adopted an equivalence decision in respect of the person's home jurisdiction under Article 47(1) MiFIR.
7. We note the reference to Title VIII MiFIR (Articles 46-49) and we assume that BaFin would exempt under § 2(5) KWG only third country persons that are:
    (a) authorised and supervised to engage in or provide the same investment activities and/or services in its home jurisdiction, and
    (b) authorised and supervised in a jurisdiction in which BaFin is confident of the legal and supervisory arrangements.
8. BaFin does not recognise the supervisory powers of US self-regulatory organisations (SROs) and we do not believe that BaFin would consider US persons that are members of a SRO to be authorised and supervised in their home jurisdiction to engage in or provide investment activities or services.

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http://dip21.bundestag.de/dip21/btd/18/109/1810936.pdf
Deutscher Bundestag Drucksache 18/10936
18. Wahlperiode 23.01.2017
Gesetzentwurf der Bundesregierung
Entwurf eines Zweiten Gesetzes zur Novellierung von Finanzmarktvorschriften auf Grund europäischer Rechtsakte
(Zweites Finanzmarktnovellierungsgesetz – 2. FiMaNoG)

Unofficial translation on following slides.

Extract – Germany - Draft of Second Act on the Amendment of Financial Market Regulations – 23 January 2017 (unofficial translation)

Deutscher Bundestag

Drucksache 18/10936

18. Wahlperiode 23.01.2017

Gesetzentwurf der Bundesregierung

Entwurf eines Zweiten Gesetzes zur Novellierung von Finanzmarktvorschriften auf Grund europäischer Rechtsakte

(Zweites Finanzmarktnovellierungsgesetz – 2. FiMaNoG)

The Federal Government

Draft of a Second Act on the Amendment of Financial Market Regulations

On the basis of European legal acts

(Second Financial Market Amendment Act - 2nd FiMaNoG)

http://dip21.bundestag.de/dip21/btd/18/109/1810936.pdf

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(30) Direct electronic access within the meaning of this Act is an agreement under which a member, a participant or a customer of a trading place of another person the use of its commercial code, so that this person orders with respect to financial instruments electronically directly to the place of business, with the exception of those referred to in Article 20 of the delegates Regulation (EU) ... [DV MiFID II]. Direct electronic access also includes agreements which prohibit the use of the infrastructure or any other interconnection system of the member, subscriber or customer by that person for the submission of orders (direct market access), as well as those agreements where such an infrastructure is not used by this person (sponsored access).

Page 33

(44) High-frequency algorithmic trading technology in the sense of this law is an algorithmic trade within the meaning of section 80 (2) sentence 1, which is characterized by

1. an infrastructure for minimizing network latencies and other delays in Order transmission (latencies) that include at least one of the following devices for input Algorithmic jobs: collocation, proximity hosting or a direct electronic High-speed access,

2. the ability of the system to carry out an order without human intervention within the meaning of Article 18 Of the Delegated Regulation (EU) ... [DV MiFID II] and

3. a high subordinate message volume within the meaning of Article 19 of the delegated regulation (EU) ... [DV MiFID II] in the form of orders, quotations or cancellations.

Page 35

(ff) The following point 11 is inserted after point 10:

"11 Undertakings, which are exclusively proprietary to financial instruments other than commodity derivatives, emission allowances or derivatives on emission certificates which do not have any other investment services, including any other investment activities, in financial instruments other than commodity derivatives, emission allowances or derivatives or emission allowances, unless

a) these undertakings are market makers,

b) the undertakings are either members or participants in an organized market or multilateral trading system or have direct electronic access to a trading place, with the exception of nonfinancial bodies located at a trading place conduct business in an objectively measurable manner directly related to the business activity or liquidity and financial management nonfinancial entities or their groups,

c) the undertakings apply a high - frequency algorithmic trading technique

d) the undertakings are self-employed in the execution of customer orders, ".

Page 69

9. adequate risk controls and thresholds for trade via direct electronic access In particular, to lay down rules on:

a) the marking of orders issued through direct electronic access, and

b) the possibility of blocking or terminating a direct electronic access at any time In the event of infringement by the holder of direct access to applicable legislation;

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Section 77 Direct electronic access

(1) A securities service company providing direct electronic access to a computerized network trade place, must

1. assess the suitability of customers using this service before granting access and regularly check,

2. the rights and obligations of the customer and the securities service provider in connection with this service in a written contract, whereby the responsibility Of the securities service provider is not transferred to the customer under this Act Be allowed,

3. determine appropriate trading and credit thresholds for the trading of these customers,

4. monitor the trade of these customers

a) ensure that customers do not exceed the thresholds set out in point 3,

b) ensure that trade meets the requirements of Regulation (EU) No 596/2014, Law and the regulations of the trading center,

c) market disturbing trading conditions or market abuse; to be notified to the competent authority, and

d) ensure that trading does not involve any risks to the securities service provider themselves.

(2) A securities service provider that provides direct electronic access to a computerized network trade place informs the Bundesanstalt and the competent authorities of the trading center to which it provides direct electronic access. The Federal Institution may provide the securities service company regular or at any time upon request a description of the Paragraph 1, as well as evidence supporting their application. On request a competent authority of the trading center to which a securities service provider the Bundesanstalt shall immediately forward this information to that authority continue.

(3) The investment services company shall ensure that records relating to the information contained in this document are available Paragraph (s) for at least five years and ensure that: These are sufficient to enable the Federal Agency to comply with the requirements of this Act to check.

Extract – Germany - Draft of Second Act on the Amendment of Financial Market Regulations – 23 January 2017 (unofficial translation) (cont.)

Page 101

88. contrary to Article 77 (1), offers a direct electronic access to a trading place, without to dispose of the systems and controls referred to therein,

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Page 101

91. as a securities service provider, provide a direct electronic access to a customer without prior written agreement with the customer which corresponds to the substantive requirements of section 77(2),

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(cccc) (d) is worded as follows:

"d) the purchase or sale of financial instruments for its own account; Direct or indirect participant of a domestic organization Market or a multilateral or organized trading system a high-frequency algorithmic trading technique that is characterized through

aa) an infrastructure for minimizing network latencies and other delays in the order transfer (latencies), which are at least one of the following devices for the input of algorithmic jobs: collocation, proximity hosting or direct electronic high-speed access,

bb) the ability of the system to perform an order without human intervention within the meaning of Article 18 of the Delegated Regulation (EU) ... [DV MiFID II] to initiate, create, forward or execute and

(cc) a high subordinate communication volume within the meaning of Article 19 the Delegate Regulation (EU) ... [DV MiFID II] in the form of contracts, course or cancellation even without a service for others (high-frequency trade),"

Page 129

(B) Paragraph 5 is worded as follows:

"(5) Subject to the provisions laid down in Title VIII of Regulation (EU) No 600/2014 of the European Economic Community Parliament and of the Council of 15 May 2014 on markets in financial instruments and amending Of Regulation (EU) No 648/2012 (OJ L 173, 12.6.2014, p. 84; L 6, 10.1.2015, p. 6;

4), as amended by Regulation (EU) No 2016/1033 (OJ L 175, 30.6.2016, p.

P. 1), the Federal Institution may, in individual cases, determine that an institution with registered office In a third country, which operates professionally in the country by means of cross-border services or to an extent comprising a commercial business set up in a commercial manner Banking operations, or to provide financial services, as defined in Sections 1a, 2c, 10 to 18, 24, 24a, 25, 25a to 25e, 26 to 38, 45, 46 to 46c and 51, paragraph 1, As long as the institution is not responsible for its domestic operations because of its supervision The competent authority in the state of origin is not additionally subject to supervision by the Federal Authority requirement. On the basis of an exemption under sentence 1, it may also determine that to the institution

Also § 24c is not applicable. Sentences 1 and 2 shall apply mutatis mutandis to institutes established in the European Union Economic area for which market entry is not regulated in Article 53b (1). "

Page 135

15. Section 32 is amended as follows: (A) the following sentences are inserted after the first sentence of paragraph 1a:

"This applies irrespective of the operation of banking transactions or the provision of financial services Within the meaning of Section 1 (1a), second sentence, points 1 to 5 and 11, even where the undertaking: Own business as a member or participant in an organized market or a multilateral market Trading system or with a direct electronic access to a trading place or with commodity derivatives, emission allowances or derivatives on emission certificates. A written in the cases of sentence 2, the Bundesanstalt does not need permission if:

Etc.

Page 141

"§ 64v Transitional provision to the Second Financial Market Enforcement Act

...

(4) For a company based in a third country, that as financial services exclusively to the purchase and sale of financial instruments for its own account after § 1 paragraph 1a sentence 3, which is

not a service for others, provides exemption pursuant to section 2 paragraph 5 from the 3rd January 2018 to the decision of the European Securities and markets authority through a registration of the company in the register referred to in article 48 of Regulation (EU) No. 600 / 2014 as provisionally granted ", if it has been a complete application for registration in the register within one year after a decision by the European Commission pursuant to article 47 of Regulation (EU) No. 600/2014 at the European Securities and markets authority."

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(8) Participants for trading within the meaning of this Act are those pursuant to § 19 to participate in exchange trading Approved traders, exchange traders, lead brokers and lead brokers. Indirect traders within the meaning of this Act are persons who are a trader to electronically transfer orders placed under restricted or non - human participation the trading participant will be forwarded to the exchange or the direct electronic access use.

Extract – Germany - Draft of Second Act on the Amendment of Financial Market Regulations – 23 January 2017 (unofficial translation) (cont.)

(9) A direct electronic access within the meaning of this Act is an agreement in which a trader of another person allows the use of his trade That person electronically submit orders for financial instruments directly to the trading center with the exception of those referred to in Article 20 of the Delegated Regulation (EU) ... [DV MiFID II] Cases. The direct electronic access also includes arrangements that make use of the Infrastructure or any other interconnection system of the Merchant by such person (Direct market access) as well as those agreements, Where such infrastructure is not used by that person (sponsored access).

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16. Section 19 is amended as follows:

a) the following paragraph 3a is inserted after paragraph 3:

"(3a) Direct electronic access may only be granted if the Exchange Rules Appropriate standards for risk controls and thresholds for trade via this access. The stock exchange regulations must include rules on the marking of orders and transactions, from a person through a direct electronic access. The stock exchange regulations must also provide for the possibility of direct electronic access to Violations of the relevant provisions of the Exchange Rules at any time can be."

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Re Section 77 (Sections 77 and 78)

Re Section 77

Section 77 shall implement Article 17 (5) of Directive 2014/65/EU. When granting direct electronic access to trading venues for third parties through investment firms are to be replaced by the monitoring and control obligations, the risks are minimized, which is the result for all parties directly involved and market integrity as a whole.

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Re Section 15 (Section 32)

With regard to subparagraph (a) (a)

The addition of the facts is, first, the consequence of the transposition of Article 2 (1) (d) of the Directive 2014/65/EU; After this derogation, it will no longer be possible without permission in accordance with Section 32 (1) (1) the proprietary business as a member or participant in an organized market or a multilateral trading system or with a direct electronic access to a trading place or with commodity derivatives or emission allowances or derivatives, unless the proprietary transaction is carried out by a company, which does not operate banking operations and provides financial services, can be objectively measurable the risks arising from the business activity or the liquidity and financial management of the company or the company group to which the company belongs. Moreover, with the addition of the offense article 2 (1) (e) of Directive 2014/65/EU. Companies covered by the derogation of Article 2 (1) (9) and of Article 2 (6) (1) (11) may also include, where appropriate, in the second sentence of Article 32 (1a).

Because of the scheme of Directive 2014/65 / EU, as set out in Annex I, A number 3 defines the "trading for own account" as a securities service and investment activity and thus also the proprietary business within the meaning of the KWG, regulates the self-sufficiency of the insured own-account business; In the KWG, on the other hand, the business itself is not as a financial service within the meaning of section 1 (1a) sentence 2 KWG, so that there is no derogation in Section 2 KWG. Any deviating from or exceeding the guidelines implementation is not connected.

It also takes into account Article 4 (1) (5) of Directive 2014/65 / EU, which provides that: "Execution of orders on behalf of customers", as defined in Annex I, Section A, point 2, of the Directive 2014/65/EU to conclude agreements, one or more financial instruments in the names of customers to buy or sell, and the conclusion of agreements on the sale of financial instruments issued by a securities firm or a credit institution.

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Re Section 3 (Section 2)

The widening of the definitions takes into account the requirements of Directive 2014/65/EU and hence future also included in the Exchange Act, to the individual categories of trading venues as well as to the direct electronic access.

The definitions of the trader and of the indirect trader, as defined in the first sentence of Article 3 (4) are moved to paragraph 8 for editorial reasons. The definition of the indirect trader is amended and will include both the user of direct electronic access in the future (3) sentence 4 (1) of the Stock Exchange Act in its current version as well as the user of a direct electronic exchange in accordance with the provisions of Directive 2014/65/EU. The change is required since the term "direct electronic access", as used by the Börsengesetz, according to the guidelines of the Directive 2014/65/EU, which will be implemented in paragraph 9 below, is defined differently. Up to now, the concept of direct electronic access, so-called order routing, and has been used synonymously.

The order routing further described in the first part of the definition of the indirect trader is hence no longer referred to as direct electronic access.

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Re Section 17 (section 19a)

Indirect traders such as order routing users or users of direct electronic access in fact, almost the same opportunities on the exchanges as authorized trading participants. While traders must comply with a variety of stock exchange regulations, indirect trading participants have not yet been covered, since the rules on stock exchange trading only apply to trading participants be valid. As a result, the new provision extends the scope of the Stock Exchange Act, to the indirect trading participants. *[emphasis added]*