

Chapter 2

Recognition requirements

2.5 Systems and controls, algorithmic trading and conflicts

2.5.1

UK

Schedule to the Recognition Requirements Regulations, paragraphs 3 – 3H

Paragraph 3 – Systems and controls

- (1) The [UK RIE] must ensure that the systems and controls, including procedures and arrangements, used in the performance of its functions and the functions of the trading venues it operates are adequate, effective and appropriate for the scale and nature of its business.

[Note: SYSC 15A contains requirements relating to the operational resilience of UK RIEs]

- (2) Sub-paragraph (1) applies in particular to systems and controls concerning -
- (a) the transmission of information;
 - (b) the assessment, mitigation and management of risks to the performance of the [UK RIE's relevant functions];
 - (c) the effecting and monitoring of transactions on the [UK RIE];
 - (ca) the technical operation of the [UK RIE], including contingency arrangements for disruption to its facilities;
 - (d) the operation of the arrangements mentioned in paragraph 4(2)(d); and
 - (e) (where relevant) the safeguarding and administration of assets belonging to users of the [UK RIE's] facilities.
 - (f) the resilience of its trading systems;

[Note: MiFID RTS 7 contains requirements on the resilience of trading systems operated by trading venues that enable algorithmic trading]

- (g) the ability to have sufficient capacity to deal with peak order and message volumes;

[Note: MiFID RTS 7 contains requirements on the adequacy of capacity of trading systems operated by trading venues that enable algorithmic trading]

- (h) the ability to ensure orderly trading under conditions of severe market stress;
- (i) the effectiveness of business continuity arrangements to ensure the continuity of the [UK RIE's] services if there is any failure of its trading systems including the testing of the [UK RIE's] systems and controls;
- (j) the ability to reject orders that exceed predetermined volume or price thresholds or which are clearly erroneous;

- (k) the ability to ensure algorithmic trading systems cannot create or contribute to disorderly trading conditions on trading venues operated by the [UK RIE];
- (l) the ability to ensure disorderly trading conditions which arise from the use of algorithmic trading systems, including systems to limit the ratio of unexecuted orders to transactions that may be entered into the [UK RIE's] trading system by a member or participant are capable of being managed;

[Note: MiFID RTS 9 contains requirements on the ratio of unexecuted orders to transactions to be taken into account by a trading venue that operates electronic continuous auction order book, quote-driven or hybrid trading systems]

- (m) the ability to ensure the flow of orders is able to be slowed down if there is a risk of system capacity being reached;
- (n) the ability to limit and enforce the minimum tick size which may be executed on its trading venues; and
- (o) the requirement for members and participants to carry out appropriate testing of algorithms.

[Note: MiFID RTS 7 contains requirements on the appropriate testing of algorithms to ensure that trading systems, when they enable algorithmic trading, cannot create or contribute to disorderly trading conditions]

- (3) For the purposes of sub-paragraph 2(c), the [UK RIE] must -
 - (a) establish and maintain effective arrangements and procedures including the necessary resource for the regular monitoring of the compliance by members or participants with its rules; and
 - (b) monitor orders sent including cancellations and the transactions undertaken by its members or participants under its systems in order to identify infringements of those rules, disorderly trading conditions or conduct that may indicate behavior that is prohibited under the market abuse regulation or system disruptions in relation to a financial instrument.
- (4) For the purpose of sub-paragraph (2)(o) the [UK RIE] must provide environments to facilitate such testing.
- (5) The [UK RIE] must be adequately equipped to manage the risks to which it is exposed, to implement appropriate arrangements and systems to identify all significant risks to its operation, and to put in place effective measures to mitigate those risks.

Paragraph 3A – Market making arrangements

- (1) The [UK RIE] must -
 - (a) have written agreements with all investment firms pursuing a market making strategy on trading venues operated by it ("market making agreements");
 - (b) have schemes, appropriate to the nature and scale of a trading venue, to ensure that a sufficient number of investment firms enter into such agreements which require them to post firm quotes at competitive prices with the result of providing liquidity to the market on a regular and predictable basis;
 - (c) monitor and enforce compliance with the market making agreements;
 - (d) inform the FCA of the content of its market making agreements; and

- (e) provide the FCA with any information it requests which is necessary for the FCA to satisfy itself that the market making agreements comply with paragraphs (c) and (d) of this sub-paragraph and sub-paragraph 2.
- (2) A market making agreement must specify-
 - (a) the obligations of the investment firm in relation to the provision of liquidity;
 - (b) where applicable, any obligations arising from the participation in a scheme mentioned in sub-paragraph (1)(b);
 - (c) any incentives in terms of rebates or otherwise offered by the [UK RIE] to the investment firm in order for it to provide liquidity to the market on a regular and predictable basis; and
 - (d) where applicable, any other rights accruing to the investment firm as a result of participation in the scheme referred to in sub-paragraph (1)(b).
- (3) For the purposes of this paragraph, an investment firm pursues a market making strategy if -
 - (a) the firm is a member or participant of one or more trading venues;
 - (b) the firm's strategy, when dealing on own account, involves posting firm, simultaneous two-way quotes of comparable size at competitive prices relating to one or more financial instruments on a single trading venue, across different trading venues; and
 - (c) the result is providing liquidity on a regular and frequent basis to the overall market.

Paragraph 3B – Halting trading

- (1) The [UK RIE] must be able to -
 - (a) temporarily halt or constrain trading on any trading venue operated by it if there is a significant price movement in a financial instrument on such a trading venue or a related trading venue during a short period; and
 - (b) in exceptional cases be able to cancel, vary, or correct any transaction.
- (2) For the purposes of sub-paragraph (1), the [UK RIE] must ensure that the parameters for halting trading are appropriately calibrated in a way which takes into account -
 - (a) the liquidity of different asset classes and subclasses;
 - (b) the nature of the trading venue market model; and
 - (c) the types of users,
 to ensure the parameters are sufficient to avoid significant disruptions to the orderliness of trading.
- (3) The [UK RIE] must report the parameters mentioned in sub-paragraph (2) and any material changes to those parameters to the FCA in a format to be specified by the FCA.
- (4) If a trading venue operated by the [UK RIE] is material in terms of liquidity of the trading of a financial instrument and it halts trading in the United Kingdom in that instrument it must have systems and procedures in place to ensure that it notifies the FCA.

[Note: MiFID RTS 12 contains requirements for when a *regulated market* is material in terms of liquidity in a *financial instrument* for purposes of trading halt notifications]

Paragraph 3C – Direct electronic access

Where the [UK RIE] permits direct electronic access to a trading venue it operates, it must -

- (1) (a) ensure that a member of, or participant in that trading venue is only permitted to provide direct electronic access to the venue if the member or participant -
 - (i) an investment firm which has permission under Part 4A of the Act to carry on a regulated activity which is any of the investment services or activities;
 - (ii) a qualifying credit institution that has Part 4A permission to carry on the regulated activity of accepting deposits;
 - (iii) is a person who falls within regulation 30(1A) of the Financial Services and Markets Act 2000 (Markets in Financial Instruments) Regulations 2017 and has permission under Part 4A of the Act to carry on a regulated activity which is any of the investment services or activities;
 - (iv) is a third country firm providing the direct electronic access in the course of exercising rights under Article 46.1 (general provisions) of the markets in financial instruments regulation;
 - (v) is a third country firm and the provision of the direct electronic access by that firm is subject to the exclusion in Article 72 of the Financial Services and Markets Act 2000 (Regulated Activities) Order 2001; or
 - (vi) is a third country firm which does not come within paragraph (iv) or (v) and is otherwise permitted to provide the direct electronic access under the Act;
- (b) ensure that appropriate criteria are set and applied for the suitability of persons to whom direct electronic access services may be provided;
- (c) ensure that a member of, or participant in, the trading venue retains responsibility for adherence to the requirements of any provisions of the law of the United Kingdom relied on by the United Kingdom before IP completion day to implement the markets in financial instruments directive in respect of orders and trades executed using the direct electronic access service, as those provisions have effect on IP completion day, in the case of rules made by the FCA under the Act, and as amended from time to time, in all other cases;
- (d) set appropriate standards regarding risk controls and thresholds on trading through direct electronic access;
- (e) be able to distinguish and if necessary stop orders or trading on that trading venue by a person using direct electronic access separately from -
 - (i) other orders; or
 - (ii) trading by the member or participant providing the direct electronic access; and
- (f) have arrangements in place to suspend or terminate the provision to a client of direct electronic access to that trading venue by a *member* of, or participant in, the trading venue in the case of non-compliance with this paragraph.

[Note: MiFID RTS 7 contains requirements on *direct electronic access* permitted through a *trading venue's* systems]

Paragraph 3D – Co-location services

- (1) The [UK RIE's] rules on colocation services must be transparent, fair and nondiscriminatory.

[Note: MiFID RTS 10 contains requirements to ensure co-location services are transparent, fair and non-discriminatory]

Paragraph 3E – Fee structures

- (1) The [UK RIE's] fee structure, for all fees it charges including execution fees and ancillary fees and rebates it grants, must -

- (a) be transparent, fair and non-discriminatory;

[Note: MiFID RTS 10 contains requirements to ensure fee structures are transparent, fair and non-discriminatory]

- (b) not create incentives to place, modify or cancel orders, or execute transactions, in a way which contributes to disorderly trading conditions or market abuse; and

[Note: MiFID RTS 10 contains requirements concerning prohibited fee structures]

- (c) impose market making obligations in individual shares or suitable baskets of shares for any rebates that are granted.

- (2) Nothing in sub-paragraph (1) prevents the [UK RIE] from -

- (a) adjusting its fees for cancelled orders according to the length of time for which the order was maintained;

- (b) calibrating its fees to each financial instrument to which they apply;

- (c) imposing a higher fee -

- (i) for placing an order which is cancelled than an order which is executed;

- (ii) on participants placing a high ratio of cancelled orders to executed orders; or

- (iii) on a person operating a high-frequency algorithmic trading technique,

in order to reflect the additional burden on system capacity.

Paragraph 3F – Algorithmic trading

- (1) The [UK RIE] must require members of and participants in trading venues operated by it to flag orders generated by algorithmic trading in order for it to be able to identify the -

- (a) the different algorithms used for the creation of orders; and

- (b) the persons initiating those orders.

Paragraph 3G – Tick size regimes

- (1) Subject to paragraph 1A, the [UK RIE] must adopt tick size regimes in respect of trading venues operated by it in -

- (a) shares, depositary receipts, exchange-traded funds, certificates and other similar financial instruments traded on each trading venue; and

[Note: MiFID RTS 11 contains requirements on the tick size regime for shares, depositary receipts, exchange traded funds and certificates]

- (b) any financial instrument for which technical standards are adopted by FCA under paragraphs 24 and 25 of Part 2 of Schedule 3 to the markets in financial instruments regulation which is traded on that trading venue.

[Note: MiFID RTS 11]

(1A) The application of tick sizes shall not prevent the [UK RIE] from matching orders that are large in scale (as determined in accordance with Article 4 of the markets in financial instruments regulation) at the mid-point within the current bid and offer prices.
 [Note: MiFID RTS 11]

(2) The tick size regime must -

- (a) be calibrated to reflect the liquidity profile of the financial instrument in different markets and the average bid-ask spread taking into account desirability of enabling reasonably stable prices without unduly constraining further narrowing of spreads; and
- (b) adapt the tick size for each financial instrument appropriately.

(3) The tick size regime must comply with Commission Delegated Regulation (EU) 2017/588 of 14 July 2016 supplementing Directive 2014/65/EU of the European Parliament and of the Council with regard to regulatory technical standards on the tick size regime for shares, depositary receipts and exchange-traded funds.
 [Note: MiFID RTS 11]

Paragraph 3H – Synchronisation of business clocks

(1) The [UK RIE] must synchronise the business clocks it uses to record the date and time of any reportable event in accordance with Commission Delegated Regulation (EU) 2017/574 of 7 June 2016 supplementing Directive 2014/65/EU of the European Parliament and of the Council with regard to regulatory technical standards for the level of accuracy of business clocks.
 [Note: MiFID RTS 25]

2.5.1A UK Schedule to the Recognition Requirements Regulations, paragraph 4(2)(ea)

Without prejudice to the generality of sub-paragraph [4(1)], the [UK RIE] must ensure that -

appropriate arrangements are made to -

- (i) identify conflicts between the interests of the [UK RIE], its owners and operators and the interests of the persons who make use of its *facilities* or the interests of the trading venues operated by it; and
- (ii) manage such conflicts so as to avoid adverse consequences for the operation of the trading venues operated by the [UK RIE] and for the [persons] who make use of its [*facilities*].

2.5.1B R In paragraph 3B(3) of the Schedule to the Recognition Requirements Regulations, under which a UK RIE must report the parameters for halting trading to the FCA, such information must be provided to the FCA in writing and delivered by any one of the methods in ■ REC 3.2.3R.

2.5.2 UK [deleted]

2.5.3 G In assessing whether the systems and controls used by a UK recognised body in the performance of its *relevant functions* are adequate, effective and

appropriate for the scale and nature of its business, the *FCA* may have regard to the *UK recognised body's*:

- (1) arrangements for managing, controlling and carrying out its *relevant functions*, including:
 - (a) the distribution of duties and responsibilities among the *members of the management body* and the departments of the *UK recognised body* responsible for performing its *relevant functions*;
 - (b) (where the staffing requirements in *MiFID RTS 7* do not apply to the *UK RIE*) the staffing and resources of the departments of the *UK recognised body* responsible for performing its *relevant functions*; and
 - (c) the arrangements made to enable *members of the management body* to supervise the departments or functions for which they are responsible;
- (2) arrangements for the identification and management of conflicts of interest;
- (3) arrangements for internal and external audit; and
- (4) information technology systems.

2.5.4 G ■ REC 2.5.5G to ■ REC 2.5.20G set out other matters to which the *FCA* may have regard in assessing the *UK RIE's* systems and controls used for the transmission of information, risk management, the operation of settlement arrangements (the matters covered in paragraph 4(2)(d) of the Schedule to the *Recognition Requirements Regulations*), the safeguarding and administration of assets and certain other aspects of its operations.

2.5.4A G Where the *MiFID/MiFIR Systems Regulations* apply to a *UK RIE*, the *FCA* will, in assessing the *UK RIE's* systems and controls, additionally have regard to the *UK RIE's* satisfaction of any relevant requirements in those regulations. Of particular importance is *MiFID RTS 7*, which will apply where a *trading venue* allows or enables *algorithmic trading*.

Information transmission.....

2.5.5 G In assessing a *UK recognised body's* systems and controls for the transmission of information, the *FCA* may also have regard to the extent to which these systems and controls ensure that information is transmitted promptly and accurately:

- (1) within the *UK recognised body* itself;
- (2) to *members*; and
- (3) (where appropriate) to other market participants or other relevant persons.

Risk management

2.5.6 **G** In assessing a *UK recognised body's* systems and controls for assessing and managing risk, the *FCA* may also have regard to the extent to which these systems and controls enable the *UK recognised body* to:

- (1) identify all the general, operational, legal and market risks wherever they arise in its activities;
- (2) measure and control the different types of risk;
- (3) allocate responsibility for risk management to *persons* with appropriate knowledge and expertise; and
- (4) provide sufficient, reliable information to *key individuals* and, where relevant, the *governing body* of the *UK recognised body*.

2.5.7 **G** [deleted]

Operation of settlement arrangements and effecting and monitoring of transactions

2.5.8 **G** In assessing a *UK RIE's* systems and controls for the operation of settlement arrangements, the *FCA* may have regard to the totality of the arrangements and processes through which the *UK RIE's* transactions are cleared and settled, including:

- (1) (in relation to non-derivatives transactions) a *UK RIE's* arrangements with another *person* under which any rights or liabilities arising from transactions are discharged including arrangements for transmission to a settlement system or *clearing house*;
- (2) (in relation to non-derivatives transactions and if relevant), a *UK RIE's* arrangements under which instructions relating to a transaction, to be cleared by another *person* by means of a *clearing facilitation service* are entered into its systems by the relevant other *person* and transmitted to the other *person*; and
- (3) the arrangements made by the *UK RIE* for monitoring and reviewing the operation of these systems and controls.

[**Note:** In relation to derivative transactions, *MiFID RTS 26* contains requirements on the systems for clearing such transactions]

2.5.8A **G** Where the requirements of *MiFID RTS 7* in respect of effecting and monitoring transactions do not apply to a *UK RIE*, the *FCA* may, in addition, assess the *UK RIE's* systems and controls for the effecting and monitoring of transactions. In doing so, it will have regard to the *UK RIE's* arrangements under which orders are received and matched, and its arrangements for trade and transaction reporting.

Safeguarding and administration of assets

2.5.9 **G** In assessing a *UK recognised body's* systems and controls for the safeguarding and administration of assets belonging to users of its *facilities*,

the *FCA* may have regard to the totality of the arrangements and processes by which the *UK recognised body*:

- (1) records the assets held and the identity of the owners of (and other *persons* with relevant rights over) those assets;
- (2) records any instructions given in relation to those assets;
- (3) records the carrying out of those instructions;
- (4) records any movements in those assets (or any corporate actions or other events in relation to those assets); and
- (5) reconciles its records of assets held with the records of any *custodian* or *sub-custodian* used to hold these assets, and with the records of beneficial or legal ownership of those assets.

Management of conflicts of interest

- 2.5.10** G A conflict of interest arises in a situation where a *person* with responsibility to act in the interests of one *person* may be influenced in his or her action by an interest or association of his or her own, whether personal or business or employment related. Conflicts of interest can arise both for the *employees* of *UK recognised bodies* and for the *members* (or other *persons*) who may be involved in the decision-making process, for example where they belong to committees or to the *management body*. Conflicts of interest may also arise for the *UK recognised body* itself as a result of its connection with another *person*.
- 2.5.11** G The *FCA* recognises that a *UK RIE* has legitimate interests of its own and that its general business policy may properly be influenced by other *persons* (such as its owners). Such a connection does not necessarily imply the existence of a conflict of interest nor is it necessary to exclude individuals closely connected with other *persons* (for example, those responsible for the stewardship of the owner's interests) from all decision-making processes in a *UK recognised body*. However, there may be decisions, primarily regulatory decisions, from which it may be appropriate to exclude an individual in certain circumstances where an interest, position or connection of his conflicts with the interest of the *recognised body*.
- 2.5.12** G ■ REC 2.5.13 G to ■ REC 2.5.16 G set out the factors to which the *FCA* may have regard in assessing a *UK recognised body's* systems and controls for managing conflicts of interest.
- 2.5.13** G The *FCA* may have regard to the arrangements a *UK recognised body* makes to structure itself and to allocate responsibility for decisions so that it can continue to take proper regulatory decisions notwithstanding any conflicts of interest, including:
- (1) the size and composition of the *management body* and relevant committees;
 - (2) the roles and responsibilities of *members of the management body*, especially where they also have responsibilities in other organisations;

- (3) the arrangements for transferring decisions or responsibilities to alternates in individual cases; and
- (4) the arrangements made to ensure that individuals who may have a permanent conflict of interest in certain circumstances are excluded from the process of taking decisions (or receiving information) about matters in which that conflict of interest would be relevant.

2.5.14 **G** The *FCA* may also have regard to the systems and controls intended to ensure that confidential information is only used for proper purposes. Where relevant, *recognised bodies* will have to comply with section 348 (Restrictions on disclosure of confidential information by the *FCA* etc.) and regulations made under section 349 (Exemptions from section 348) of the *Act*.

2.5.15 **G** The *FCA* may also have regard to the contracts of employment, staff rules, letters of appointment for *members of the management body*, members of relevant committees and other guidance given to individuals on handling conflicts of interest. Guidance to individuals may need to cover:

- (1) the need for prompt disclosure of a conflict of interest to enable others, who are not affected by the conflict, to assist in deciding how it should be managed;
- (2) the circumstances in which a general disclosure of conflicts of interest in advance of any particular instance in which a conflict of interest arises may be sufficient;
- (3) the circumstances in which a general advance disclosure may not be adequate;
- (4) the circumstances in which it would be appropriate for a conflicted individual to withdraw from involvement in the matter concerned, without disclosing the interest; and
- (5) the circumstances in which safeguards in addition to disclosure would be required, such as the withdrawal of the individual from the decision-taking process, or from access to relevant information.

2.5.16 **G** The *FCA* may also have regard to the arrangements made:

- (1) for enforcing rules or other provisions applicable to staff and other *persons* involved in regulatory decisions; and
- (2) to keep records of disclosures of conflicts of interest and the steps taken to handle them.

Internal and external audit

2.5.17 **G** A *UK recognised body's* arrangements for internal and external audit will be an important part of its systems and controls. In assessing the adequacy of these arrangements, the *FCA* may have regard to:

- (1) the size, composition and terms of reference of any audit committee of the *UK recognised body's governing body*;

- (2) the frequency and scope of external audit;
- (3) the provision and scope of internal audit;
- (4) the staffing and resources of the *UK recognised body's* internal audit department;
- (5) the internal audit department's access to the *UK recognised body's* records and other relevant information; and
- (6) the position, responsibilities and reporting lines of the internal audit department and its relationship with other departments of the *UK recognised body*.

Information technology systems

2.5.18

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Where *MiFID RTS 7* applies to the *UK RIE*, the *FCA* may, in assessing the adequacy of the *UK recognised body's* information technology systems, have regard to:

- (1) the organisation, management and resources of the information technology department within the *UK recognised body*;
- (2) the arrangements for documenting the design, development, implementation and use of information technology systems; and
- (3) the arrangements for maintaining, recording and enforcing technical and operational standards and specifications for information technology systems, including the procedures for the evaluation and selection of information technology systems.

2.5.19

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Where *MiFID RTS 7* does not apply to a *UK RIE*, the *FCA* may in addition have regard to the performance, capacity and reliability of its systems. The *FCA* may also have regard to the arrangements for maintaining, recording and enforcing technical and operational standards and specifications for information technology systems, including:

- (1) the procedures for the evaluation and selection of information technology systems;
- (2) the arrangements for testing information technology systems before live operations;
- (3) the procedures for problem management and system change;
- (4) the arrangements to monitor and report system performance, availability and integrity;
- (5) the arrangements (including spare capacity and access to back-up facilities) made to ensure information technology systems are resilient and not prone to failure;
- (6) the arrangements made to ensure business continuity in the event that an information technology system does fail;

- (7) the arrangements made to protect information technology systems from damage, tampering, misuse or unauthorised access; and
- (8) the arrangements made to ensure the integrity of data forming part of, or being processed through, information technology systems.

2.5.20

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The *FCA* may have regard to the arrangements made to keep clear and complete audit trails of all uses of information technology systems and to reconcile (where appropriate) the audit trails with equivalent information held by system users and other interested parties.