

Financial Services Authority

The FSA's approach to regulation of the market infrastructure

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It is the FSA's policy to make responses to discussion papers available for public inspection. If you wish your comments to be treated as confidential, please indicate this in your response. The names of all respondents will be published.

Responses should reach us by 24 March 2000.

Executive summary

- 1 This paper sets out for discussion some high-level ideas on how the FSA might develop its approach to regulation of the market infrastructure. This is in response to the rapid transition to electronic trading and resultant changes to capital market structure and participant roles. The aim is to initiate a debate with market participants and market users. The feedback will assist the FSA in deciding whether to develop its initial thinking into firm proposals.
- 2 The Financial Services and Markets Bill sets out statutory objectives for the FSA, including to maintain confidence in the financial system. A major FSA concern in respect of market infrastructure is therefore to ensure that the benefits brought by electronic trading are not undermined by regulation that fails to respond efficiently to accompanying changes in market structure and participant roles.
- 3 The paper discusses, and seeks views on, the following:
 - the regulation of the various mechanisms emerging for the trading of ‘exchange-traded’ investments and how best to consider potential market fragmentation; and
 - increasing concentration and organisation of trading within some OTC markets, which raises issues previously only relevant to exchange markets, including the reliability and efficiency of central trading mechanisms.
- 4 There is also a general issue concerning increased market reliance on the robustness and integrity of market systems and technology, and technology-based services other than trade execution – such as order-routing and post-trade processing.
- 5 The FSA will look first to the markets and market participants to deliver high standards of market fairness, efficiency and safety. But to the extent regulatory action may become necessary, the paper looks at two broad areas:

- regulation of trading mechanisms (i.e. operators of exchanges and non-exchange or 'alternative' trading systems); and
 - regulation of providers of other infrastructure services.
- 6 To support market confidence the FSA's view is that it may be necessary in the future to take greater account of broader trading activity in an investment when considering the regulation of trading mechanisms. This may entail the introduction of comparable regulatory requirements for all significant trading mechanisms in a particular market sector, be these exchange or non-exchange trading systems. However the requirements for each major market sector could differ, since the FSA's view is that requirements for achieving the fair, efficient and safe operation of markets are not uniform across all sectors. Rather, they depend on factors such as economic significance of the investment traded, its inherent liquidity and, importantly – especially for OTC markets – the nature of market participants.
 - 7 In regulating other infrastructure providers the FSA's view is that regulation may need to be tailored more precisely to the risks posed by specific activities.
 - 8 Relevant to both trading mechanism operators and other infrastructure providers is whether the FSA should consider establishing a high-level controls focused (i.e. non-technical) systems integrity standard that would apply to *all* infrastructure providers. Such a standard is already being proposed for recognised investment exchanges and recognised clearing houses in consultation papers 39 and 39a published at the same time as this paper.

1 Introduction and purpose

Introduction

- 1.1 The continuing transition to electronic trading, both domestically and across international borders, is fuelling significant changes in capital market structure and participants' roles. While these developments deliver greater efficiencies and new opportunities for market users, they also raise significant issues for regulators. There is an important balance the FSA needs to strike between ensuring that regulation does not unnecessarily impede competition and innovation, and addressing any new risks arising from change.

Scope and purpose

- 1.2 This paper focuses on regulation of the market infrastructure. That is to say, it looks at regulation of infrastructure providers – entities whose business is organising and supporting the functioning of markets.¹ Infrastructure providers include exchanges, non-exchange (or 'alternative') trading systems, clearing houses and market service providers generally.²
- 1.3 The paper analyses what structural developments in markets might mean for the FSA's current approach to regulating infrastructure providers, and lays out for discussion some thoughts on how that approach might need to be altered to take account of recent and prospective developments. The main focus of the paper is UK regulation of trading mechanisms (i.e. exchanges and non-exchange trading systems) and the services that support their operation. The paper is not directly concerned with either on-line broking or the significant cross-border issues that are associated with electronic markets.

1 Markets, in the context of this paper, means markets organised and/or operating in the UK in investment products that fall within the scope of the Financial Services Act 1986 ('the Act'), or will fall within the scope of the Financial Services and Markets Bill ('the Bill'), due to come into force during 2000.

2 To the extent their activities fall within the FSA's regulatory scope – i.e. amount to investment business under the Act, or will amount to regulated activities under the Bill.

- 1.4 The aim at this stage is to stimulate debate amongst market participants. The FSA will then draw on this debate in deciding whether to bring forward firm proposals for consultation later in the year.
- 1.5 Many of the issues raised in this paper were considered by the Securities and Investments Board in its 1994-5 Equity Market Review.³ The FSA is revisiting them at this stage in light of:
- regulatory reform, in particular the governments' proposed introduction in the Financial Services and Markets Bill ('the Bill') of statutory objectives and principles for financial regulation;
 - its consultation, in parallel with this paper, on its proposed oversight of recognised investment exchanges (RIEs) and recognised clearing houses (RCHs) under the Bill;⁴
 - the much more widespread adoption of electronic trading since the mid 1990s and greater clarity as to its implications;
 - the increasing interest in the implications of changing market structure on the part of market participants and regulators internationally, and the interest of the EU Commission as it considers possible revisions to the Investment Services Directive.

Views sought

- 1.6 The FSA seeks views on specific issues throughout the paper and there is a summary list of questions at **Annex A**. The FSA would also welcome information and views on issues not covered by the questions, but which respondents consider are relevant to the subject matter of the paper. **Responses should reach us by 24 March 2000.** It is the FSA's policy to make all responses to discussion papers available for public inspection. If you wish your comments to be treated as confidential, please indicate this in your response. The names of all respondents will be published.

3 See SIB documents *Regulation of the United Kingdom Equity Markets, Discussion Paper* (February 1994), and *Regulation of the United Kingdom Equity Markets, A Report by the Securities and Investments Board* (June 1995).

4 FSA consultation papers 39 and 39a, *RIE and RCH Sourcebook*.

2 Regulatory framework for UK markets

The regulatory framework

- 2.1 The current regulatory framework for market infrastructure providers in the UK is set by the Financial Services Act 1986 ('the Act'). Broadly speaking the Act requires any infrastructure provider conducting business that falls within the scope of the legislation to become:
- an RIE or RCH; or
 - an authorised firm.
- 2.2 The regulatory regime for **RIEs and RCHs** requires them to meet recognition requirements (laid out in the Act¹) designed essentially to ensure that they regulate their markets and clearing systems to appropriate standards. The Act imposes no responsibility on RIEs and RCHs for the general regulation of their members, and they impose their rules by contract. Continuing compliance with the recognition requirements is overseen by the FSA.
- 2.3 By contrast **authorised firms** are subject to rules that focus primarily on a firm's 'fitness and properness', financial resources and conduct of business with clients, though there are also provisions governing conduct between professionals in OTC markets.² These rules are made either by a self-regulatory organisation – the Securities and Futures Authority (SFA) for 'broker dealer' infrastructure providers – or by the FSA itself. Among the firms directly regulated by the FSA is a small group of specialist infrastructure providers that engage in limited activities – most commonly some form of order routing. The regime for these firms ('the service company regime') disappplies most of the rules generally applicable to authorised firms.
- 2.4 In the context of this paper, two important aspects of the current regulatory framework need to be borne in mind.

1 Schedule 4 and section 39 respectively, and also requirements set out in Schedule 21 to the Companies Act 1989.

2 For SFA regulated firms, the SFA market counterparty rules, and for FSA regulated firms trading in the foreign exchange, money and bullion markets, the London Code of Conduct.

- Market regulation – that is to say the day-to-day regulation of organised markets to ensure that they operate in a fair, efficient and safe way (see paragraph 2.11 below) – is, in front-line terms, essentially the responsibility of RIEs.
- Infrastructure providers have a choice of regulatory regime. Even if they can meet the recognition requirements for an RIE (or RCH), they are not compelled to become one. They may apply instead for authorisation as a firm (either a broker dealer or a service company).

2.5 Factors that may influence an entity to opt for RIE (or RCH) status include greater flexibility in the regulatory regime, tax advantages³ and a general regulatory environment that incentivises (and sometimes even requires) market participants to use their facilities. But there are also certain costs – not least that of having an in-house regulatory resource to monitor members' compliance with the rules. **Annex B** sets out in some detail the main differences between the RIE/RCH regime and the authorised firm regimes. It also lists the main factors that might currently influence an entity's choice between regimes.

2.6 Broadly speaking, the Bill, which is expected to replace the Act during 2000, will carry forward this 'two regime' approach. The principal change will be the winding up of the SROs (including the SFA) and the bringing of *all* authorised firms under direct FSA regulation.

Regulatory alignment with market structure

2.7 Regulation under each of the regimes described above delivers what the FSA considers to be broadly appropriate levels of regulation for RIE and OTC markets. This outcome largely reflects the current homogeneity of individual market sectors, in particular the concentration 'on-exchange' of most of the trading in investments admitted to trading on RIEs. However, the FSA recognises that future developments in electronic trading and processing, together with increased competition, could relatively quickly alter UK market structure in a way that might require it to modify both its oversight of RIEs (and RCHs) *and* its direct regulation of authorised firm infrastructure providers. The development most likely to have a significant regulatory implication is substantial fragmentation in RIE markets, whether resulting from competition between RIEs, or between RIEs and non-exchange trading systems. Increasing concentration and organisation within some OTC markets may also raise regulatory issues, though the FSA is not minded to alter

3 Exemptions from Stamp Duty on trades in UK equities (50 basis points) are available only for RIE registered intermediaries, and only in respect of transactions executed on-exchange.

significantly its present approach to markets that are essentially inter-professional.

2.8 From a regulatory point of view, the FSA believes that developments along the lines described above would raise four central questions:

- Where there is more than one trading mechanism for the same product, will failure to achieve consistency of regulation between those mechanisms be likely to undermine the fairness, efficiency and safety (i.e. quality) of the market for that product as a whole?
- Should all (or at least all significant) trading mechanisms for exchange-traded instruments (i.e. including those operated by authorised firms) be subject to regulation with similar regulatory aims to that of the RIE recognition requirements?
- Are there standards that should apply to trading mechanisms for OTC investments when the market in those investments comes to resemble that of an organised market, akin to an exchange?
- Are there any additional risks the FSA needs to address as markets become more dependent on the robustness and integrity of systems and technology?

Q2.1 Do you agree that these four questions are, from a regulatory point of view, the central ones that the FSA should address? If not, what do you consider the central questions to be?

Statutory objectives

2.9 The FSA will be guided in addressing the questions posed above by an important innovation in the Bill – the setting of statutory objectives for financial regulation.⁴ These objectives articulate the principal purposes for which the government considers the FSA should be using its powers. The four regulatory objectives are:

- maintaining confidence in the financial system;⁵
- promoting public understanding of the financial system;
- securing the appropriate degree of protection for consumers; and
- reducing the extent to which it is possible for a business carried on by a regulated person to be used for a purpose connected with financial crime.

⁴ Set out in clause 2 of the Bill.

⁵ The Bill (clause 3(2)) defines financial system as meaning the financial system operating in the United Kingdom, including financial markets and exchanges, regulated activities and other activities connected with financial markets and exchanges.

2.10 All the objectives have some relevance to any consideration of the appropriate regulation of infrastructure providers. Clearly, maintaining confidence in financial markets is of prime importance. But the maintenance of confidence in markets is heavily dependent on market users feeling that they are adequately protected and that markets have robust arrangements for tackling financial crime.

2.11 In the FSA's view, market users are most likely to feel confident in markets when those markets operate **fairly, efficiently and safely**. What those terms imply, and what regulatory standards they demand, will vary from market to market. But broadly speaking:

- a **fair market** is one which is free of unfair practices and abuse, and in which all investors have reasonable opportunity to trade at the best price available for their transaction size;
- an **efficient market** is one in which users – at reasonable cost – can achieve optimum pricing for their type of transaction as a result of having adequate information on, and access to, current supply and demand, and in which participants have maximum choice of methods for minimising their exposure to risk; and
- a **safe market** is one in which the infrastructure is reliable and robust, and performance of trades is reasonably assured.

2.12 At present, fair, efficient and safe operation of markets is most explicitly captured for regulatory purposes in the high level recognition requirements for RIEs (see **Annex B**) and proposed FSA guidance thereon in consultation papers 39 and 39a,⁶ published in parallel to this paper.

Q2.2 Do you agree with the FSA's view that the basic requirements for market confidence are that markets should work fairly, efficiently and safely (as defined in paragraph 2.11)? Are any of these three requirements more important to you than the others?

Principles of good regulation

2.13 In meeting its statutory objectives, the Bill also proposes that FSA must have regard to a number of factors,⁷ designed to ensure that it weighs carefully the costs as well as the benefits of any new regulatory requirements. It is required to take into account in particular:

⁶ *RIE and RCH Sourcebook*.

⁷ Clause 2(3). The other considerations are: the need to use its resources in the most efficient and economic way; the responsibilities of those who manage the affairs of authorised persons; and the principle that a burden or restriction which is imposed on a person, or on the carrying on of an activity, should be proportionate to the benefits, considered in general terms, which are expected to result from the imposition of that burden or restriction.

- the desirability of facilitating innovation in connection with regulated activities;
- the principle that competition between authorised persons should not be impeded or distorted unnecessarily; and
- the international character of financial services and markets and the desirability of maintaining the competitive position of the UK.

2.14 Innovation and competition in markets are currently flourishing. The FSA has no desire to stand in the way of developments that achieve this; **it will look first to the markets and market participants to set and enforce the high standards of fairness, efficiency and safety required to support market confidence.** But issues associated with the new environment must be adequately addressed. So, where market-led solutions do not achieve this, the FSA will take appropriate action.

2.15 If the FSA decides that it needs to take such action, it will not be alone. Leading regulators in other jurisdictions have also given much attention recently to the issues raised in this paper. Attached at **Annex C** is a summary of the current responses of the United States, Canada and Australia.⁸ The Forum of European Securities Commissions (FESCO) is currently pursuing similar issues, as is the European Commission.⁹ Although cross-border issues are not a main focus of this paper, the FSA has prepared it with the international nature of financial markets in mind.

Q2.3 Do you consider there are any particular lessons to be drawn from overseas experience?

Q2.4 Do you consider that any changes are required to EU legislation, in particular the Investment Services Directive, to cater for changes in market structure?

Way forward

2.16 The rest of this paper sets out what the FSA sees as the main issues it needs to address in answering the questions posed in paragraph 2.8. It also lays out, for discussion and against the background of the statutory objectives, the FSA's view of the general direction in which it should be moving in its approach to regulation of the market infrastructure.

⁸ The issues are also being considered by the Hong Kong Securities and Futures Commission against the background of legislative reform (the draft Securities and Futures Bill).

⁹ FESCO has launched an information gathering exercise with a view to reaching a European regulatory consensus on the issues arising from the regulation of 'alternative' (i.e. non-exchange trading systems). FESCO's intention is to feed the results of that work into the European Commission's proposed review of the terms of the Investment Services Directive, on which a green paper is expected during 2000. IOSCO, the international forum for securities regulators has also done work in this area. It published in 1994 a document that set out some principles for addressing regulatory issues raised by non-exchange trading systems (which it termed proprietary trading systems).

3 The changing market environment

- 3.1 As indicated in Section 2, technological advance is causing markets to re-engineer and restructure themselves in ways that may require regulators to reshape their own approach. This section concentrates on the general impact technological advance has had on exchange markets, on OTC markets and the provision of infrastructure services.

Exchange markets

- 3.2 In exchange markets – broadly defined for the purposes of this paper as markets in exchange-traded instruments – the impact of electronic trading on market structure has been substantial, though the extent of that impact has varied from country to country and market to market. From a regulatory viewpoint, two aspects in particular are of interest:
- the multiplication of trading mechanisms; and
 - the resultant blurring of roles between exchanges and firms.

Multiplication of trading mechanisms

- 3.3 The multiplication of trading mechanisms has come about largely in response to three factors:
- inefficiencies in existing core trading mechanisms;
 - demand for a greater range of trading functionality than may be offered by a single trading mechanism;
 - developments in information technology that provide the possibility of achieving market entry at relatively low cost (and adding new capacity and functionality later).
- 3.4 It has been argued that perceived ‘inefficiency’ is an especially important factor behind the increase in the number of trading mechanisms operating in

the US. None of the leading securities or derivatives exchanges there has so far introduced electronic order-book trading. And there has been an upsurge in new electronic trading mechanisms, generally referred to as electronic communications networks (ECNs). At the end of last year 9 such systems were registered with the US's Securities & Exchange Commission. Their share of trading is generally estimated at around 30% in NASDAQ securities and approaching 5% in New York Stock Exchange stocks.

- 3.5 In Europe non-exchange trading systems have so far played a much lesser role. This is largely because most exchanges have already introduced electronic order-books. In the UK, four of the six exchanges now have them for their principal products, and a fifth has electronic trading for one of its contracts.¹
- 3.6 Nonetheless, there are still significant opportunities for non-exchange trading systems that offer functionality an exchange order-book may not. In the UK equity markets, for instance, a number of London Stock Exchange (LSE) members, referred to as retail service providers (RSPs), execute a significant proportion of retail business, as principals, on their own automated dealing systems. This opportunity arises, at least in part, because non-standard settlement remains a common feature of retail business in the UK while the LSE's electronic trading service (SETS), in common with most other order-books, handles orders for standard settlement only. In addition, several LSE members offer institutional investors electronic trade execution via 'crossing' functionality² not currently available on SETS; and last September a number of major institutional investors announced plans to establish their own trading system (E-Crossnet) to enable them to cross business in leading European equities.
- 3.7 Over the short to medium term this competition to provide electronic trading mechanisms offering functionality to suit different users may well intensify. Already, more sophisticated functionality for executing large trades is entering the marketplace – an example being the Optimark preferencing system in the US.³
- 3.8 While new trading mechanisms clearly meet some user needs, and tend to drive down costs and increase efficiency, they may also lead to significant fragmentation of markets. The clear regulatory interest here is that the development of competing trading systems should take place in a way that does not damage overall market confidence.

1 The London Stock Exchange, Tradepoint, LIFFE and OM London all trade principally or entirely through electronic order-books. The IPE has introduced an electronic order-book for its natural gas contracts.

2 Functionality that enables investors to enter orders anonymously into a 'black box' for matching the maximum amount of business possible according to a pre-determined formula, usually a reference price derived from recent exchange trading. The LSE has recently announced that it intends to develop such functionality for SETS.

3 The Optimark system enables users to attach a number of conditions to their proposed trade, for instance the volume in which they are prepared to deal at different price levels.

Q3.1 What do you think are the key factors that attract exchange market participants to use non-exchange trading systems? Do you think these systems will attract significant volume in any of the UK exchange markets (including that for equities)? Are there any particular impediments to such migration?

Changing roles of exchanges and firms

- 3.9 The progressive switch to electronic trading is having a further significant effect on exchange markets by altering, and blurring, the respective roles of exchanges and (broker dealer) firms. Where exchanges have introduced electronic order-books they have fundamentally changed the nature of the exchange. Rather than simply acting as the provider of a trading floor or a pit and leaving the members to execute trades, exchanges have taken on a much more direct role in facilitating trading, effectively assuming at least part of the role of a broker dealer.
- 3.10 Progressively, exchanges may make deeper inroads into traditional broking business, either by building more broker functionality into their own trading algorithms or by opening their trading mechanisms to direct participation by investors themselves.
- 3.11 The other side of this coin is, of course, the development of electronic trading mechanisms by authorised firms (both broker dealers and service companies). In effect, both they and the exchanges can now offer similar trading functionality in terms of order matching and execution within the same market place. Yet the regulatory regimes that apply to them are very different in both objectives and substance. This mismatch is discussed further in Section 4.
- Q3.2 Do you see the business profile of the UK's exchanges changing materially during the next 5 or so years? If so, how do you expect to see them change? And what impact do you think those changes might have on exchange markets (for example, on the role of the exchanges as regulators of those markets, on efficiency of competition etc.)?

OTC markets

- 3.12 One of the most striking features of OTC markets in recent years is the way technology has been having the opposite effect on market structure to its effect in exchange markets. In the latter, the multiplication of trading mechanisms has tended to fragment what have traditionally been centralised markets. In the OTC markets, on the other hand, the arrival of electronic trading mechanisms is tending to move markets from bilateral telephone trading, whether investor to investor or via a broker, to multilateral screen trading.

- 3.13 The principal drivers of this change have been:
- the growth in the markets for OTC investments and the drive for standardisation of certain products, thus increasing suitability for electronic trading;
 - the need on the part of all market participants to reduce trading costs as competition and product standardisation have put pressure on margins.
- 3.14 While complex trades, bilaterally negotiated, remain a significant feature of OTC markets, the trend towards electronic trading in products with standardised terms appears to have a self-feeding momentum. Although spot foreign exchange contracts will not fall within the FSA's statutory remit when the Bill comes into force, the rapid way in which the EBS and Reuters Transaction Services electronic systems have come to dominate this market illustrates the extent to which OTC markets are embracing centralised electronic trading.
- 3.15 What has taken place in spot foreign exchange markets also appears increasingly to be the direction of bond, repo and swap markets. In bond markets electronic trading systems have proliferated in the US, and trading is now starting to move to the screen in Europe.
- 3.16 Recent legislative change in the UK is also assisting the trend. Secondary legislation allowing contracts traded OTC, and cleared through an RCH or RIE, to benefit in certain circumstances from the insolvency protection of Part VII of the Companies Act 1989⁴ has opened the way for the London Clearing House to develop clearing services for both swaps and repos.⁵ The risk management benefits arising from this may, in turn, encourage more activity in products that increasingly lend themselves to screen trading and centralised clearing.
- 3.17 While this emerging infrastructure is bringing benefits to OTC market participants in terms of trading efficiency and risk management, the increasing concentration of the trading – and clearing – process is beginning to give some of these markets the attributes of exchange markets. The regulatory considerations raised by this are discussed in Section 4.

Q3.3 What do you think are the costs and benefits to OTC market participants of trading (and clearing) through more centralised mechanisms? And do you expect the current trend of centralisation in some OTC market sectors to continue?

⁴ The Financial Markets and Insolvency Regulations 1998. S.I. 1998/1748.

⁵ It is also worth noting that the proposed recognition requirements for clearing houses under the Bill will mean a clearing house no longer has to provide clearing services for an RIE in order to be recognised. This enables RCHs to be set up that provide clearing services only for OTC investments.

Infrastructure services in general

- 3.18 As technology changes the way in which markets are organised and participants execute trades, it is also increasing opportunities for commercial provision – including through the internet – of niche infrastructure services to support trading both pre and post execution. Over the past 10 or so years the result has been a boom in the ancillary market service industry.
- 3.19 The landscape used to be one in which a small number of specialists – information vendors such as Reuters and Bloomberg, and the RIEs and RCHs themselves – provided pre- and post-trade market services. It is now one in which they operate alongside a plethora of software and communication companies.
- 3.20 As market users and market participants look forward to the goal of straight-through (i.e. automated front to back) processing of trades, infrastructure providers have built up a complex web of communication links (both private network and internet based), information databases and matching systems, glued together by common communication protocols. This web supports the provision of market information, order-entry, order-routing, post-trade matching, trade allocation and even the issuance of settlement instructions. It will rapidly become an increasingly critical part of the market infrastructure both nationally and internationally. Clearing and settlement itself has so far remained the province of a few specialist providers.⁶ Although the current trend is toward consolidation on a Europe-wide basis,⁷ the Settlement Finality Directive, implemented in the UK in December 1999, suggests the possibility that new players may yet emerge.⁸
- Q3.4 What do you see as the main future growth areas for the pre- and post-trade market service industry? Would you expect future growth primarily to be internet, or private network, based?

6 In the UK these are the two RCHs (the London Clearing House and CREST) and a self-clearing RIE (OM London).

7 Illustrated, for example, by the strategic alliance announced in November 1999 between Euroclear and Sicovam.

8 The Directive was implemented in the UK by the Financial Markets and Insolvency (Settlement Finality) Regulations 1999. The designation requirements set out in these regulations use some concepts similar to those under the Act (and prospectively the Bill) applying to RCHs.

4 Issues

- 4.1 This section considers a number of regulatory issues raised by the developments described in Section 3. It is particularly concerned with whether or not the benefits emerging from the evolving market developments are offset by factors that could damage market confidence.

Exchange markets

- 4.2 Competition between trading mechanisms in exchange-traded investments should produce benefits for all market users. However, the accompanying fragmentation of previously (largely) centralised trading could adversely affect the standards of fairness, efficiency and safety which sustain user confidence in these markets. Such effects may be greater when fragmentation takes place between exchanges and non-exchange trading systems, where the differences between the current regulatory regimes are significant, than between exchanges alone, where the regulatory regimes are broadly similar.
- 4.3 Given this backdrop, the core issue for the FSA is the extent to which, in pursuing its market confidence objective, it should regulate trading mechanisms with a view to achieving as much integrity as possible in the overall trading in a publicly (i.e. exchange-) traded instrument. In other words, should the FSA be concerned about the fairness, efficiency and safety not only of individual exchanges' arrangements, but also of *all* the significant trading mechanisms in exchange-traded investments. Without such an approach, a number of cross-market issues would arise that could potentially undermine market confidence. Principal among them are:
- the efficiency of the 'entire' market, in particular the quality of price-formation, the levels of transparency and access to opportunities to trade at the best price (paragraphs 4.4 to 4.8);

- fairness – i.e. both reasonable access to trading information and trading opportunity, and completeness of arrangements to support the detection and deterrence of market abuse (paragraphs 4.9 to 4.11);
- safety – i.e. the adequacy of systems, from the viewpoint not only of the direct users of the systems but also of any more general market dependence on their efficient functioning (paragraphs 4.15 to 4.18).

Q4.1 Do you agree that, where there is more than one trading mechanism for an exchange-traded instrument, these are the principal cross market issues on which the FSA should focus? Are there any other issues – for example, relating to arrangements for clearing and settlement (important from a ‘safe’ markets perspective) – that you think the FSA should be taking into account?

Price-formation

- 4.4 Many – not least exchanges themselves – would argue that the quality of price-formation and the efficiency of the market process are at a peak when the totality of (informed) supply and demand at any one time meet in a central marketplace. This has the additional advantage that the best trading opportunities are easy to see, making it relatively straightforward for a market user to achieve best execution.
- 4.5 Even without fragmentation between exchanges, or between exchanges and non-exchange trading systems, there can of course be significant fragmentation in a market. This may arise from the degree of trading exchanges permit without exposure of business to the market as a whole, or ‘time’ fragmentation as liquidity is spread across increasingly longer trading hours.
- 4.6 Nonetheless the FSA’s starting point is that overall market efficiency, and therefore market confidence, is likely to be best served for exchange-traded investments when all the significant venues for price-formation in these investments operate (be it within the framework of an RIE’s regulation, or on an OTC basis) to common transparency standards.¹ This does not mean that all trading mechanisms must have the same degree of transparency, particularly pre-trade transparency, or that the degree of transparency should be identical for each type of investment. In some markets (for example, in the FSA’s view, the equity market) a high level of transparency is needed to ensure that market users have reasonable opportunity both to access current pricing information and to achieve best execution. But that may not always be the case.

¹ Price-formation refers to the formation of a binding agreement to buy/sell investments (i.e. matching of orders) on the basis of at least one side of the trade having advertised a firm price, or participated in an auction at a firm price. It does not refer to the matching of orders by reference to a price determined elsewhere.

- 4.7 In any event, it is important for regulators to understand the basis on which a market fragments. Where competition delivers lower trading costs, improved service, trading mechanisms that better meet participant needs, and these developments tend to improve the overall market, the process is likely to be benign.²
- 4.8 But fragmentation might have a less positive outcome. For example, it may be associated with trading mechanisms that unfairly disadvantage some groups of market participant by unreasonably denying them the opportunity to trade at best prices for their size of trade, or to access at reasonable cost information that might be material to making informed trading decisions. It may also lead to the reliability of price formation in individual market-centres being undermined.³
- Q4.2 Do you agree with the FSA's view that market efficiency is likely to be best served for exchange-traded investments when all significant venues for price-formation in those investments operate to common transparency standards?
- Q4.3 Do you think trading mechanisms that match orders for execution at a reference price (i.e. a price determined elsewhere) enhance or weaken the overall quality of the relevant market?
- Q4.4 Do you view fragmentation as a positive or negative development for UK markets (including the equity market)? What would be your specific concerns if such fragmentation became significant?

Market surveillance

- 4.9 Effective deterrence and detection of market abuse is fundamental to maintaining investor confidence in markets. Surveillance of trading is an integral part of this process. The recognition requirements for RIEs specifically mandate them to have arrangements for monitoring transactions that take place on their markets. Even when trading in an investment takes place on more than one exchange, each exchange must still monitor its own trading in that investment and information sharing and co-operation arrangements between the exchanges can be put in place to ensure that there is a full trading overview. The same applies in respect of trading on different exchanges of 'related' investments, for example, of a security on one exchange and a derivative of that security on another.

2 Technology is in fact available that would allow market participants to overcome the practical difficulties of fragmentation by aggregating information from all trading mechanisms in a market, and using it to form a view on price and where best to trade. There is commercial advantage to be gained from having access to this kind of 'virtual market' information (for example, arbitrage opportunities and being able to get a better price for customers than might otherwise be the case).

3 This might happen, for example, where a non-exchange trading system trading on the basis of reference prices from a specific market centre draws so much of the business from that market centre that the reliability of the reference price is itself undermined.

- 4.10 By contrast, when trading takes place on a trading mechanism outside (i.e. not subject to the rules of) any exchange there is currently no similar obligation on the operator of that trading mechanism to monitor transactions or to share information. And where the system is operated by an 'arranger' who does not put the business through its own books (for example, an introducing or name passing broker) there is currently no requirement for the system operator even to report the transactions to their conduct of business regulator (SFA or the FSA).⁴
- 4.11 Where an investment is traded on multiple trading mechanisms there might therefore be some value in either, or some combination of:
- monitoring arrangements by each significant trading mechanism (i.e. exchanges and non-exchange trading systems), and appropriate co-ordination between those trading mechanisms;
 - contracting of all monitoring for that investment (i.e. on each significant trading mechanism) to one body, whether an exchange, the FSA itself, or some other body approved by the FSA for that purpose.

Q4.5 Do you think that universal cross-market surveillance arrangements would need to be put in place where an exchange market fragments? If yes, what in your view would be the most cost-effective and appropriate mechanism?

OTC markets

- 4.12 At present, the FSA's and the SFA's approach to the regulation of OTC trading between professionals is essentially 'light touch'. In addition to the principles governing conduct of business between professionals in OTC markets for SFA authorised firms, the FSA also administers the London Code, where it sets down good market practice for trading in a number of wholesale money market instruments for banks and firms listed under section 43 of the Act. Very shortly, the FSA will unify these two elements by putting forward proposals for a new integrated Inter-Professionals Code.
- 4.13 The essential point here is that regulation is designed on the basis that OTC markets are predominantly professionals' markets, with little justification for regulation to intervene to protect the participants. So long as OTC markets remain fundamentally inter-professional, the FSA can see little reason to change that approach.

⁴ SFA rules require all transactions processed through the books of a broker dealer infrastructure provider (for example, on a matched principal basis) to be reported to the SFA within T+1. SFA's transaction reporting requirements were introduced primarily to help in assessing whether firms were complying with SFA conduct of business rules. They were not specifically designed to ensure fair markets or detect market abuse, although the information gathered may in practice be used for this purpose.

4.14 However, it is also the case that some OTC markets are taking on a more organised form, with the trading process becoming increasingly centralised. Some of these markets may in due course wish to extend their participant base beyond the purely professional investor. These developments raise three potential issues:

- the importance to market users' confidence that trading mechanisms on which they come increasingly to depend meet high standards of reliability and efficiency. The growing interdependence of markets, both technologically and commercially, materially increases the risk to market confidence in the event of any core system in the OTC markets failing to operate to adequate standards (see further below);
- the related risk to market confidence that may arise if the operators of trading mechanisms organise trading in a way that increases counterparty or settlement risk;
- a consumer risk issue if new trading mechanisms invite participation from less sophisticated investors, when regulation to support the fairness, efficiency and safety of such markets is not designed with the protection of such investors in mind.

Q4.6 Bearing in mind the existing regulatory framework for OTC markets do you believe their increased centralisation and organisation is likely to pose significant risks to (a) market confidence or (b) the FSA's other statutory objectives, including consumer protection (paragraph 2.9)?

Infrastructure services in general

4.15 A common theme identified for both exchange and OTC markets is the increasing reliance market participants now place on robustness and integrity of systems and technology – the electronic infrastructure of markets. This is, quite clearly, not just a trading mechanism issue, but an issue relevant to infrastructure services at all stages of the trading cycle.

4.16 Where the reliability and integrity of the electronic infrastructure is inadequate, the consequences are potentially serious. They may include unavailability of services that are critical to the normal operation of markets, and delivery of inaccurate information (either deliberate or accidental) that adversely affects price-formation, liquidity, market monitoring and clearing and settlement. In other words, there is a potential threat to the fairness, efficiency and safety of the markets.

4.17 In light of these considerations, the FSA is proposing to give high-level controls focused (i.e. non-technical) guidance to RIEs and RCHs on issues

related to the integrity of IT systems. This would be backed up by ongoing review and monitoring.⁵ Key areas proposed for coverage include:

- evaluation and selection of IT systems;
- testing, performance and the management of system problems and change;
- resilience, damage protection and business continuity; and
- protection of data integrity within a system.

4.18 Going forward, the FSA will need to consider whether, and if so how widely, such guidance (and ongoing review and monitoring arrangements) should be extended to infrastructure providers in general, particularly given the potential for growth in internet based services. The generally beneficial impact on service standards of the significant competition that exists amongst infrastructure providers has been identified by the FSA as a relevant consideration in developing an appropriate regulatory approach in this area.

Q4.7 Do you believe that high-level (non-technical) systems integrity standards for all infrastructure providers along lines set out in paragraph 4.17 would have a positive impact on the overall safety of the markets?

Q4.8 To what extent do you believe that risks associated with market reliance on systems and technology could be mitigated by, for example, commercial pressures on systems providers and the existence of competing providers (particularly in the pre-trade area)?

5 See consultation paper 39a, *RIE and RCH Sourcebook*, Annex B, paragraphs 2.3.12 – 2.3.14.

5 Proposed regulatory response: high level

5.1 This section sets out some high level ideas as to how the FSA could consider modifying its regulatory approach to address the issues highlighted in Section 4. The overall aim would be to ensure that confidence in UK financial markets is sustained through the current period of evolution in market structure and process, that investors are properly protected and that regulatory arrangements are adequate to detect and deter market abuse. The areas covered are:

- the regulation of trading mechanism operators (relevant to both exchange and OTC markets); and
- the regulation of providers of other infrastructure services.

5.2 To implement the ideas set out in this section the FSA would consider:

- modifying its guidance to RIEs (and RCHs) on the recognition requirements for recognised bodies; and/or
- use of the powers contained in clause 110 of the Bill to make rules and issue guidance for authorised firms.

Regulation of trading mechanism operators

5.3 Section 2 explained how UK regulation to support the fairness, efficiency and safety of markets is exchange-market focused and is achieved primarily through RIEs (and RCHs). As many exchanges have, historically, provided the only market place for the products they trade, RIE regulation has often amounted – in effect – to regulation of the overall UK domestic market in those instruments. Absent centralised trading mechanisms, the more limited regulation of OTC markets has been achieved, primarily, through conduct of business regulation applicable to market participant firms.

5.4 While it is difficult to predict where commercial forces will take market structure over the next few years, the FSA needs to ensure that its approach to regulation of infrastructure providers – in both exchange and OTC markets – properly addresses the regulatory issues identified earlier, in particular those arising from:

- any fragmentation of markets, and therefore regulation, in exchange-traded investments (should this occur);
- increased centralisation of trading in some OTC markets;
- the choice of regulatory regimes (RIE/RCH or authorised firm¹) for providers of trading mechanisms.

Possible response – high level

5.5 To address these prospective regulatory issues adequately, **the FSA's view is that it may need in future to take greater account of broader trading activity in an investment.** This could lead it to consider the regulation of *all* trading mechanism operators in a particular market, with the broad aim of ensuring that consistent standards of efficiency, safety and fairness applied to the overall market in an investment or class of investment. These standards would aim to ensure, taking into account the nature of the market, that:

- market users are able to base their trading decisions on sufficient information relating to supply and demand across the whole market place (crucial if market efficiency is to be optimised);
- price-formation² is not undermined by trading mechanisms that may detract from overall market efficiency (for example, by unreasonably restricting access to trading or internalising order-flow to an extent that public price-formation does not adequately reflect the overall level of supply and demand);
- investors are not deprived unreasonably of opportunities to participate, for their size of trade, at the best prices available across the market place as a whole;
- the regulation of trading mechanisms providing similar functionality and posing similar risks is broadly similar;
- detection of market abuse and financial crime can take place both effectively and efficiently;
- key systems on which market users depend meet adequate standards.

1 Choice of two authorised firm regimes – broker dealer or service company.

2 Price-formation in those parts of a market to which all participants have access – for example, the central limit order-book of an equity exchange, such as SETS for the LSE.

- 5.6 To implement a 'broader trading activity' approach, and meet the objectives set out above, the FSA believes it would need to give fresh thought, in particular, to developing:
- comparable regulatory requirements for trading mechanisms that provide similar functionality and pose similar degrees of risk; and
 - differential requirements for achieving the fair, efficient and safe operation of markets in particular investment sectors, taking into account such factors as the economic significance of the instrument, its inherent liquidity and the participant profile.
- Q5.1 Do you agree that, in order to meet the aims set out above (i.e. to support the fairness, efficiency and safety of markets), the FSA may need in future to take much greater account of broader trading activity in an investment?
- Q5.2 Do you think that a broader market approach would be appropriate – in principle – for infrastructure providers in OTC markets trading standardised products, as well as for the exchange markets?

Comparable regulatory requirements for trading mechanisms

- 5.7 One of the issues highlighted in Sections 3 and 4 was the blurring of functionality between exchanges and other market participants where both provide trading mechanisms, and the fact that operators have a choice of regulatory regimes that have different objectives.
- 5.8 To support the market confidence objective the FSA is therefore minded to review the differences between regulatory requirements for operation of trading mechanisms by authorised firms (non-exchange trading systems) and RIEs, with a possible view to aligning them more closely.
- 5.9 The degree of any alignment would depend on the role of trading mechanisms in the markets in which they operate (e.g. the extent to which they contribute to price formation), their individual significance and the nature of the market itself (e.g. wholly professional, largely retail etc). Overall, the FSA believes this might result in some additional regulation (or at least refocusing of existing regulation) for firms operating non-exchange trading systems for certain types of investment. But, in turn, the FSA's review of the level of regulation needed to achieve market confidence (and its other statutory objectives) for the trading of different groups of investment may lead it to re-calibrate its guidance to RIEs³ on the level of regulation needed to meet the 'orderly conduct of business' recognition requirement in any particular sector.

3 That is, the guidance currently being consulted on in consultation papers 39 and 39a.

5.10 Organisations operating trading mechanisms would still need to take their own decisions as to which regime to apply for; and there may be a number of factors that influence that choice (see **Annex B**). But, to a large extent, changes along lines set out above may narrow that choice to a decision as to whether they wish themselves to take responsibility for imposing standards on users of their facilities, or whether they wish to place themselves under direct regulation by the FSA.

Q5.3 What do you think the impact would be, for example on efficiency of competition, if organisations with similar roles and providing similar services were regulated along similar lines?

Q5.4 Given the differences in existing regulation between RIEs and authorised firms (as identified in Annex B), what costs and benefits would any adjustment to regulation along lines set out above have on operators of trading mechanisms who are authorised firms?

Investment sectors – market operation standards

5.11 In conjunction with an approach that broadly aligned regulation between trading mechanisms with similar roles and functionality, the FSA believes it is appropriate to take into account the trading characteristics and existing standards prevailing in the various markets in which those trading mechanisms operate.

5.12 The FSA believes that this approach would enable it better to tailor regulation for markets with different risk profiles. The aim would be focus on a small number of key factors (such as, the nature of the participant base, risks associated with the investment traded and normal levels of liquidity) rather than risk becoming over-elaborate.

Q5.5 Do you believe a flexible regulatory approach that applied different requirements where prevailing market conditions justified them would be appropriate and cost-effective?

Q5.6 What factors, in addition to those mentioned in paragraph 5.12, should the FSA consider in determining how regulation should be applied to different investment sectors?

Identifying new regulatory requirements

5.13 To put the approach set out above into practice, the FSA would need to:

- determine the appropriate regulatory approach for individual investment sectors; and

- identify those entities to which any specific new regulation should apply (i.e. define 'trading mechanism').
- 5.14 As indicated in paragraph 5.5, the principal purpose in considering any new regulatory requirements would be to ensure that trading mechanisms operating outside an RIE's rules do so in a way that underpins overall confidence in the markets for the relevant investment sector. The focus of any additional regulatory requirements would, therefore, depending on the particular market, be on:
- maintenance of records and the ability to monitor transactions or supply information to third parties for monitoring;
 - provision of information to regulatory authorities to underpin the orderliness of markets and to detect and deter financial crime and market abuse;
 - promotion of sufficient transparency to facilitate high quality price-formation across the market place;
 - sufficient open access to trading to provide market users with reasonable opportunity to obtain the best price for their size of trade;
 - proper protection of retail investors with direct access to trading mechanisms.
- Q5.7 Do you agree that these aspects would be the appropriate (and cost-effective) focus for any additional regulatory requirements on trading mechanisms?
- Q5.8 Are there any other factors you think the FSA should be taking into account? For example, do you think the FSA should be setting 'proper market' requirements beyond RIEs?⁴ And if so, for what types of trading mechanism and/or investment sector?

Defining trading mechanisms

- 5.15 Entities to which the FSA would consider applying additional regulatory requirements would be those engaged in providing facilities for the execution of orders – that is to say, those systems at the heart of the market, bringing together buying and selling interests in a way that forms or results in an irrevocable contract. **Annex D** sets out four broad types of service that might fall within this category.
- 5.16 In many cases, these entities will underpin price-formation in a market. But this need not be the case. The FSA would also include within its definition

⁴ Proper markets, in relation to an investment, are characterised by adequate forces of supply and demand, effective means of settlement and delivery and availability of adequate information. See further consultation paper 39a Annex B, section 2.12 of the draft sourcebook for RIEs and RCHs.

systems that create contracts by matching buying and selling interest on the basis of a reference price determined elsewhere. What the FSA is likely to exclude from its definition are systems that do no more than act as advertising or bulletin boards for posting indications of interest (the regulation of which would be reviewed as part of the risk-based review of other service providers – see further below).

- 5.17 The definition above is a broad starting point in that it potentially captures any trade execution functionality, regardless of whether that functionality operates bilaterally or multilaterally, and regardless of the technology used. Before proposing any additional regulatory requirements, the FSA would want to narrow it down.
- 5.18 In this context, two questions in particular arise. The first is how the FSA should address the issue of trading mechanisms operated by firms which are themselves members of an RIE. Here the FSA inclines to an approach that would exclude such firms' trading mechanisms from additional regulatory requirements imposed directly on them by the FSA. Otherwise, this may tend to confuse the regulatory responsibilities of RIEs and those of the FSA. On the other hand, the FSA might wish to review periodically whether the way those trading mechanisms operate within an RIE is fully consistent with high quality price-formation.⁵
- 5.19 The second issue relates to the materiality of any individual trading mechanism within the market in which it is operating. The FSA's broad view on this issue is that it needs to develop a graduated approach. While it considers that there is merit in capturing trade and transaction reporting from trading mechanisms with only a very low level of market share, it recognises that it may be inappropriate to mandate pre-trade transparency or a greater degree of open access from non-exchange trading systems that account only for an immaterial proportion of trading in a market.⁶

Q5.9 What criteria should the FSA adopt in considering how non-exchange trading systems (particularly broker dealer trading mechanisms) should be able to operate within RIEs?

Q5.10 Do you agree that, to support the fairness and efficiency of markets, the FSA should require all non-exchange trading systems to comply with a market standard (depending on investment sector) for transaction reporting and post-trade transparency?

Q5.11 And further, do you agree that non-exchange trading systems accounting for more than a set proportion of trading in an

5 See consultation paper 39a, *RIE and RCH Sourcebook*, Annex B section 2.13.

6 As set out in **Annex C** this approach has been taken by the SEC in the United States, where requirements for non-exchange trading systems (referred to as Alternative Trading Systems) are graduated as their share of the volume traded in a particular investment moves through thresholds of 5%, and 20%.

investment (say somewhere between 5% and 20%) should be required to (a) make public and (b) make accessible quotes or bids and offers on their systems? And if so, should thresholds be set in relation to individual investments, or the group of investments, or some combination of the two?

Q5.12 What would be an appropriate approach (per Q5.11) if a significant proportion of the trading in an investment or investment sector takes place outside the UK?

Cross-market linkages

5.20 In practice, there is no point in the FSA mandating greater cross-market linkage if the systems do not exist to provide it. The FSA's strong instinct in this area is that the market can, and will, provide its own solution.

5.21 However, where it becomes apparent that a market structure is not working efficiently, the FSA does not rule out using regulation as a tool to influence market development. For example, if, in the market for exchange-traded equities, it became clear that fragmentation was causing a serious misalignment of prices, or investors were being consistently denied access to the best prices available (for their size of trade), then the FSA might need to consider asking relevant RIEs and non-exchange trading systems to think creatively about how they might put in place a virtual cross-market order-book and/or a consolidated tape of post-trade information. But before taking any such action the FSA would need to understand fully why the market had failed to produce its own solution.

Q5.13 What linkages (if any) do you believe a fragmented market needs in order to operate fairly and efficiently?

Q5.14 Do you agree with the FSA's assessment that market participants would themselves have sufficient incentive to deliver a solution to any risks or potential problems that fragmentation might create? What are these incentives, and can you see any circumstances in which they might not operate?

Regulation of other infrastructure providers

5.22 The section on trading mechanisms above essentially sets out how the FSA would propose addressing issues related to the fair and efficient operation of markets. The third element of market confidence is that markets should operate safely. Clearly, there is no value in market users being able to deal with confidence in fair and efficient markets if they are open to significant risks in the clearing or settling of their transactions. But in an increasingly electronic market place there are other 'safety' issues:

- of a general nature, about the reliability and integrity of the electronic infrastructure (to which the FSA's potential response was discussed in Section 4); and
 - of a more specific nature, relating to the range of other services (as set out in Section 3) growing up to support the trading process and which vary in terms of the risks they pose to the safe operation of markets.
- 5.23 We have no jurisdiction in respect of market services that fall outside the scope of the FSA's remit under the legislation. However, some infrastructure activities are investment activities under the Act, and will be regulated activities under the Bill. These include activities such as order-routing and certain post-trade activities. At present, the FSA directly regulates eight service providers under its service company regime. In the FSA's view, a differentiated regulatory approach to such companies should be retained, and we propose to consult on this in the second quarter of 2000.
- 5.24 However, in the longer-term it may be appropriate to develop the present 'one regime fits all' approach for service companies and tailor regulation more precisely to the risks posed by specific activities. This will fit in with the FSA's more differentiated, risk-based approach to firms' regulation and will take account of the extent to which problems in the firm/activity would be likely to leave the broader market at risk. Such an approach might potentially open up the regime to firms undertaking a wider range of activities than the service company regime would currently allow.
- Q5.15 From the perspective of 'safe' market operation, clearing (i.e. calculating the obligations owed by counterparties to each other) and settlement (i.e. discharging those obligations) are both clearly 'high' risk activities. Of the following additional market services (which may fall within the FSA's regulatory scope), which would you categorise as being 'high', 'medium' or 'low' risk and why?
- Order entry (i.e. supporting the transmission of an order from a client to an intermediary).
 - Order routing (i.e. the routing of orders for execution).
 - Post-trade matching (i.e. supporting the process of checking, prior to clearing or settlement, that both counterparties have a common understanding of the terms of a trade).
 - Trade allocation (i.e. supporting the process of allocating the outcome of trades back to specific clients).
 - The issuance of settlement instructions (i.e. instructing, irrevocably, the clearing or settlement of a specific trade).

Compatibility with the FSA's statutory duties

- 5.25 Any specific proposals brought forward on regulation of the market infrastructure would, before they were introduced, need to undergo comprehensive assessment of compatibility with the FSA statutory duties under the Bill.⁷ One specific element of this assessment would be cost benefit analysis. In asking questions throughout this paper, the FSA has had regard to some of the basic information it is likely to need in order to complete cost benefit analyses. Clearly, detailed information could only be gathered when (and if) formal proposals are made.
- 5.26 The FSA has identified six categories of market impact for policy proposals which form a framework for analysis.⁸ It would be helpful if, so far as possible in answering the questions set out in this paper, you could have regard to these six categories, which are:
- **Direct costs.** This relates to the *additional* resources regulators may need in order to operate and enforce a proposed policy.
 - **Compliance costs.** What are the *additional* resources a regulated organisation (i.e. an RIE or an authorised firm) might need to comply with a proposed policy? (This includes time – and management time – used by regulated organisations and their employees.)
 - **Quantity of products sold.** Are increases in costs of bringing products to the market as a result of the policy proposed likely to result in a change in prices likely to affect the volume of sales? Products, in this context, could be either the infrastructure services themselves, or investments the trading in which such services support.
 - **Quality of products offered.** Is the policy proposed likely to raise the quality of products offered i.e. the ability of infrastructure services to support the fair, efficient and safe operation of markets?
 - **Variety of products offered.** Is the policy proposed likely to affect the range of products available i.e. different infrastructure services, including for example trading mechanisms with different levels of functionality?
 - **Efficiency of competition.** Is the policy proposed likely to affect the way in which regulated infrastructure providers compete for business volume in the market? What effect is that likely to have?⁹

7 See Section 2 – paragraphs 2.9-2.15. The statutory duties encompass the FSA's formal objectives (i.e. confidence in the financial system; public understanding of the financial system; protection for consumers; and fighting of financial crime) and its general duties (i.e. to have regard to efficient use of FSA resources; responsibility of senior management of regulated entities; desirability of facilitating innovation; principle that competition should not be distorted or impeded unnecessarily; regard to international nature of financial services and desirability of maintaining the competitive position of the UK; and need for costs of regulation to be proportionate to their benefits).

8 For more information, see the FSA's September 1999 Occasional Paper, *Cost Benefit Analysis in Financial Regulation*.

9 A potential beneficial impact of the proposals outlined in the paper should be increased fairness, efficiency and safety in the operation of markets (or at least prevention of any deterioration therein). There is therefore an overlap between this impact, and that on product quality.

6 Process

Timing and next steps

- 6.1 It would be helpful if comments on this paper could reach FSA by 24 March 2000. A feedback statement will be published by the end of the second quarter.
- 6.2 Following consideration of the responses, the FSA will decide whether, and if so how, to refine the high level ideas set out in this paper, and review regulatory and supervisory arrangements in place for RIEs (and RCHs), non-exchange trading systems and market service providers in that light.
- 6.3 The FSA's present intention is that any firm proposals for change arising from that review will be consulted on during the second half of 2000.

Other consultations

- 6.4 With the Bill expected to come into force during 2000, a programme of consultation is already underway on the FSA Handbook as it will be applied at that time. This includes, or will include during 2000, consultations on:
 - a sourcebook for RIEs and RCHs (published at the same time as this paper);
 - an interim regime for existing service companies;
 - a code of conduct for dealing and arranging activities between professionals (the Inter-professionals Code); and
 - prudential and conduct of business rules for all other authorised firms, including non-exchange trading systems.
- 6.5 It is in the interests of infrastructure providers to participate in relevant consultations set out above. It is by no means a foregone conclusion that the ideas set out in the paper will be developed into firm proposals for regulatory change.

Glossary

<i>Authorised firm</i>	A firm that is authorised to conduct investment business under the terms of the Financial Services Act 1986 (the Act) or will be within the terms of the Financial Services and Markets Bill (the Bill). <i>Broker dealers</i> and <i>service companies</i> are regulated as authorised firms.
<i>Broker dealer</i>	In the UK domestic context, a firm regulated by the Securities and Futures Authority as a broker and/or a dealer. Otherwise, the overseas equivalent thereof. The FSA currently operates an additional regime (the London Code) for brokers who are exempt from the requirement to be authorised under section 43 of the Act. When the Bill comes into force, section 43 exempt status will no longer be available, and the London Code and SFA regimes will be merged. For that reason, this paper does not analyse separately the two regimes.
<i>Clearing house</i>	In the UK domestic context, a recognised clearing house under the terms of the Act. Otherwise, the overseas equivalent thereof.
<i>Exchange</i>	In the UK domestic context, a recognised investment exchange under the terms of the Act. Otherwise, the overseas equivalent thereof.
<i>Exchange-traded investment</i>	An investment that has been admitted to trading on a recognised investment exchange. Trading in such an investment would be 'on-exchange' to the extent it was subject to the rules of that recognised investment exchange.

<i>Infrastructure provider</i>	An entity whose business is organising and supporting the functioning of markets. Infrastructure providers include exchanges, clearing houses, non-exchange (or 'alternative') trading systems and service providers whose activities amount to investment business within the terms of the Act, or will do within the terms of the Bill.
<i>Market regulation</i>	The regulation of organised markets to ensure that they operate in a fair, efficient and safe way (see further paragraph 2.11).
<i>Non-exchange trading system</i>	A trading mechanism provided by an authorised firm that brings together those who wish to buy and sell the same types of investment, and falls within one of the broad categories set out in Annex D .
<i>OTC investment</i>	An investment that has not been admitted to trading on a recognised investment exchange.
<i>Service company</i>	An infrastructure provider whose activities amount to investment business within the terms of the Act, and is regulated directly by the FSA under the terms of the service company regime.

Summary list of questions

Note:

Your response to this consultation paper would be of most interest and use to the FSA if, in addition to making any big picture points, you could:

- Answer as many as you can of the specific questions set out below.
- Give reasons for all your answers, illustrated wherever possible by examples or statistics.
- Have regard, wherever possible, to the six categories of market impact relevant to cost benefit analysis – set out in paragraph 5.26.

- Q2.1 Do you agree that the four questions set out in paragraph 2.8 are, from a regulatory point of view, the central ones that the FSA should address? If not, what do you consider the central questions to be?
- Q2.2 Do you agree with the FSA's view that the basic requirements for market confidence are that markets should work fairly, efficiently and safely (as defined in paragraph 2.11)? Are any of these three requirements more important to you than the others?
- Q2.3 Do you consider there are any particular lessons to be drawn from overseas experience?
- Q2.4 Do you consider that any changes are required to EU legislation, in particular the Investment Services Directive, to cater for changes in market structure?
- Q3.1 What do you think are the key factors that attract exchange market participants to use non-exchange trading systems? Do you think these systems will attract significant volume in any of the UK exchange markets (including that for equities)? Are there any particular impediments to such migration?

- Q3.2 Do you see the business profile of the UK's exchanges changing materially during the next 5 or so years? If so, how do you expect to see them change? And what impact do you think those changes might have on exchange markets (for example, on the role of the exchanges as regulators of those markets, on efficiency of competition etc.)?
- Q3.3 What do you think are the costs and benefits to OTC market participants of trading (and clearing) through more centralised mechanisms? And do you expect the current trend of centralisation in some OTC market sectors to continue?
- Q3.4 What do you see as the main future growth areas for the pre- and post-trade market service industry? Would you expect future growth primarily to be internet, or private network, based?
- Q4.1 Do you agree that, where there is more than one trading mechanism for an exchange-traded instrument, the principal cross market issues on which the FSA should focus are those set out in paragraph 4.3? Are there any other issues – for example, relating to arrangements for clearing and settlement (important from a 'safe' markets perspective) – that you think the FSA should be taking into account?
- Q4.2 Do you agree with the FSA's view that market efficiency is likely to be best served for exchange-traded investments when all significant venues for price formation in those investments operate to common transparency standards?
- Q4.3 Do you think trading mechanisms that match orders for execution at a reference price (i.e. a price determined elsewhere) enhance or weaken the overall quality of the relevant market?
- Q4.4 Do you view fragmentation as a positive or negative development for UK markets (including the equity market)? What would be your specific concerns if such fragmentation became significant?
- Q4.5 Do you agree that universal cross market surveillance arrangements would need to be put in place where an exchange market fragments? If yes, what in your view would be the most cost-effective and appropriate mechanism?
- Q4.6 Bearing in mind the existing regulatory framework for OTC markets do you believe their increased centralisation and organisation is likely to pose significant risks to (a) market confidence or (b) the FSA's other statutory objectives, including consumer protection (paragraph 2.9)?

- Q4.7 Do you believe that high-level (non-technical) systems integrity standards for all infrastructure providers along lines set out in paragraph 4.17 would have a positive impact on the overall safety of the markets?
- Q4.8 To what extent do you believe that risks associated with market reliance on systems and technology could be mitigated by, for example, commercial pressures on systems providers and the existence of competing providers (particularly in the pre-trade area)?
- Q5.1 Do you agree that, in order to meet the aims set out in paragraph 5.5, (i.e. to support the fairness, efficiency and safety of markets), the FSA may need in future to take much greater account of broader trading activity in an investment?
- Q5.2 Do you think that a broader market approach would be appropriate – in principle – for infrastructure providers in OTC markets trading standardised products, as well as for the exchange markets?
- Q5.3 What do you think the impact would be, for example on efficiency of competition, if organisations with similar roles and providing similar services were regulated along similar lines?
- Q5.4 Given the differences in existing regulation between RIEs and authorised firms (as identified in Annex B), what costs and benefits would any adjustment to regulation along lines set out in paragraphs 5.7 to 5.10 have on operators of trading mechanisms who are authorised firms?
- Q5.5 Do you believe a flexible regulatory approach that applied different requirements where prevailing market conditions justified them would be appropriate and cost effective?
- Q5.6 What factors, in addition to those mentioned in paragraph 5.12, should the FSA consider in determining how regulation should be applied to different investment sectors?
- Q5.7 Do you agree that the aspects set out in paragraph 5.14 would be the appropriate (and cost-effective) focus for any additional regulatory requirements on trading mechanisms?
- Q5.8 Are there any other factors you think the FSA should be taking into account? For example, do you think the FSA should be setting 'proper market' requirements beyond RIEs? And if so, for what types of trading mechanism and/or investment sector?
- Q5.9 What criteria should the FSA adopt in considering how non-exchange trading systems (particularly broker dealer trading mechanisms) should be able to operate within RIEs?

- Q5.10 Do you agree that, to support the fairness and efficiency of markets, the FSA should require all non-exchange trading systems to comply with a market standard (depending on investment sector) for transaction reporting and post trade transparency?
- Q5.11 And further, do you agree that non-exchange trading systems accounting for more than a set proportion of trading in an investment (say somewhere between 5% and 20%) should be required to (a) make public and (b) make accessible quotes or bids and offers on their systems? And if so, should those thresholds be set in relation to individual investments, or the group of investments, or some combination of the two?
- Q5.12 What would be an appropriate approach (per Q5.11) if a significant proportion of the trading in an investment or investment sector takes place outside the UK?
- Q5.13 What linkages (if any) do you believe a fragmented market needs to build in order to operate efficiently?
- Q5.14 Do you agree with the FSA's assessment that market participants would themselves have sufficient incentive to deliver a solution to any risks or potential problems that fragmentation might create? What are these incentives, and can you see any circumstances in which they might not operate?
- Q5.15 From the perspective of 'safe' market operation, clearing (i.e. calculating the obligations owed by counterparties to each other) and settlement (i.e. discharging those obligations) are both clearly 'high' risk activities. Of the following additional market services (which may fall within the FSA's regulatory scope), which would you categorise as being 'high', 'medium' or 'low' risk and why?
- Order-entry (i.e. supporting the transmission of an order from a client to an intermediary).
 - Order routing (i.e. the onward routing of orders for execution).
 - Post-trade matching (i.e. supporting the process of checking, prior to clearing or settlement, that both counterparties have a common understanding of the terms of a trade).
 - Trade allocation (i.e. supporting the process of allocating the outcome of trades back to specific clients).
 - The issuance of settlement instructions (i.e. instructing, irrevocably, the clearing or settlement of a specific trade).

Current regulation

- 1 This annex sets out the main differences between the regulatory regimes currently in place for RIEs and RCHs (the recognised body regime), and for other infrastructure providers which operate as authorised firms (the authorised regime(s)). It also identifies factors that might influence an infrastructure provider's choice between those regimes.

Main differences between regimes

- 2 An essential difference between the recognised body regime and the authorised regime(s) is that recognised bodies are themselves regulators who establish rules governing the conduct of their members or participants and are required to monitor and enforce compliance with those rules – subject to oversight by the FSA. The FSA has only limited powers to make rules directly applicable to recognised bodies. In contrast, authorised firms are subject to rules made by the FSA or a relevant self-regulating organisation, regulating the conduct of their investment business.
- 3 Market infrastructure providers may choose whether they operate as recognised bodies or authorised firms. Neither the Act, nor the Bill require (or allow) the FSA to compel an entity to become a recognised body simply because of the nature of the activities it undertakes or because it would be capable of being recognised as such.
- 4 Infrastructure providers that choose the authorised regime have a further option. They may seek authorisation either as a member of a self-regulating organisation – usually the Securities and Futures Authority, the regulator for broker dealers – or directly from the FSA as a service company. Service companies are relatively lightly regulated. This reflects the risks arising from the limited scope of the activities they are permitted to conduct,¹ and the fact

1 Service companies are restricted to doing investment business within paragraph 13(b) of Schedule 1 to the Act (making, or offering or agreeing to make, arrangements with a view to a person who participates in the arrangements buying, selling, subscribing for or underwriting investments.) These activities are not core services under the Investment Services Directive and so service companies do not qualify for the 'ISD passport' which enables ISD firms to provide investment services in other European Union member states without becoming authorised in those states. In addition, service companies are not allowed to: deal with non-professional investors; guarantee or otherwise be responsible for performance of transactions arranged or settled through the facilities they provide; approve the contents of investment advertisements under the terms of section 57 of the Act.

that service company activities do not qualify for an EU passport under the Investment Services Directive.

- 5 The table below broadly summarises the main regulatory differences between the recognised body and authorised regime(s).² **From this table it can be seen that only the recognised body regime aims specifically to address market regulation (i.e. issues relevant to the fair, safe and efficient operation of markets).**

	Recognised body regime	Authorised firm regime(s)	
		Broker dealers	Service companies
Rules and rule-making	Regulators in their own right who establish rules governing the conduct of their members or participants, and are required to monitor and enforce compliance with those rules – subject to oversight by the FSA.	Subject to rules made by the SFA. (May make contractual ‘rules’ with clients for system use.)	Subject to rules made by the FSA. (May make contractual ‘rules’ with clients for system use.)
Relationship with the FSA	Failure to comply with recognition criteria could lead to derecognition. (The Bill will give the FSA a power of direction over recognised bodies.)	Breach of rules likely to lead to disciplinary action and possible revocation of authorisation.	Breach of rules likely to lead to disciplinary action and possible revocation of authorisation.
Governance	Nothing explicit in the Act. (Regulations under the Bill will require recognised bodies to be fit and proper persons.)	Must be a fit and proper person.	Must be a fit and proper person.
Directors and managers	Directors and managers are not subject to approval by the FSA.	Directors and managers may be subject to the SFA’s individual registration scheme and are likely to be subject to the Approved Persons regime under the Bill.	Directors and managers are not subject to approval by the FSA under current rules, but are likely to be subject to the Approved Persons regime under the Bill.
Shareholder controllers	Shareholder controllers are not subject to approval by the FSA.	Shareholder controllers subject to vetting by the SFA.	Shareholder controllers are not subject to approval by the FSA.

² The requirements set out in the table are those that apply to infrastructure providers who operate trading mechanisms, trading mechanisms being the main focus of this paper.

	Recognised body regime	Authorised firm regime(s)	
		Broker dealers	Service companies
Financial resources	Must have financial resources sufficient for the proper performance of its functions. Actual levels depend on risk exposure (e.g. whether involved in clearing).	Must comply with specific capital requirements depending on nature of risks associated with its business.	Must maintain adequate financial resources to meet its investment business commitments and to withstand the risks to which its business is subject.
Admission criteria for users	Unrestricted, provided admission criteria do not jeopardise ability to meet recognition requirements.	Unrestricted subject to know your client and disclosure rules.	Not permitted to admit non-professional investors as users.
Products traded	Can only admit for trading instruments in which there is a proper market.	No proper market requirements. Must comply with general SFA conduct of business rules when trading products for customers.	No relevant requirements.
Trading process	Must ensure orderly conduct of business e.g. in relation to transparency and proper protection of investors.	No explicit rules related to ensuring orderly conduct of business, but required to deal fairly with clients.	Service companies may only provide facilities enabling others to buy or sell. No requirements related to ensuring orderly conduct of business.
Performance of trades by those using facilities	Must have arrangements for ensuring the performance of trades.	Trades executed within a broker dealer trading mechanism would be subject to general conduct of business obligations (applied to counterparties to that trade and to the broker dealer itself). Counterparty risks would be reviewed as part of ongoing supervision.	Not permitted to guarantee performance of trades.
User default	Must have rules for dealing with user defaults, thereby mitigating systemic risk.	Must hold capital to mitigate against the risk of counterparty default, but no requirement to have default rules per se.	No requirement to have arrangements, procedures or capital held against defaults.

	Recognised body regime	Authorised firm regime(s)	
		Broker dealers	Service companies
Monitoring and enforcement	Must have arrangements and resources that enable it to monitor and enforce compliance with its rules.	No requirement on broker dealers to monitor trading activities of clients using the trading mechanisms they offer.	No requirement on service companies to monitor trading activities of clients using the trading mechanisms they offer.
Transaction recording	Must have satisfactory arrangements for securing recording of transactions carried out on its facilities.	Must maintain records of all transactions to which it is a party or which it carries out on a client's behalf.	No relevant requirements.
Information-sharing	Formal obligation to share regulatory information.	No specific rules, although must co-operate with regulator (FSA principles).	No specific rules, although must co-operate with regulator (FSA principles).
Complaints	Must have effective arrangements for the investigation of complaints in respect of business transacted by means of its facilities. No right of reference to an ombudsman.	Must have arrangements for proper handling of complaints relevant to its compliance with SFA regulations. Retail investors have right of reference to an independent Ombudsman.	Must have arrangements for proper handling of complaints relevant to its compliance with FSA regulations. Ombudsman scheme not relevant because service companies are not allowed to deal with non-professional investors.
Compensation	No requirement to have arrangements for compensation of market users.	Retail investors can claim up to £48,000 from the investors' compensation scheme for losses incurred as a result of regulatory non-compliance by a broker dealer.	Investors' compensation scheme available in theory. In practice, not relevant because service companies are not allowed to deal with non-professional investors.

Influences on choice of regime

- 7 In today's environment, the most critical factor for an infrastructure provider in assessing which regulatory regime would be appropriate for it is probably the general consideration of whether the total cost to it of meeting the requirements of the recognised body regime would represent a worthwhile investment. But there are other factors that may influence choice, and which potentially make the decision a less straightforward one. These are set out in the following two tables.

Table 1 – Regulatory factors

	Explanation
Regulatory overhead	As recognised bodies are regulators in their own right, they must fund and support a regulatory function. Authorised firms do not have to incur these costs.
Insolvency protection	Up until 11 December 1999 it was only market contracts entered into with or under the rules of a recognised body that were protected by the special insolvency regime in Part VII of the Companies Act 1989. With the implementation of the Settlement Finality Directive in the UK, protection from the normal operation of insolvency law may also be available for transfer orders effected by 'systems' that have been designated under the terms of the Directive. Authorised firms may seek designation as 'systems' provided that the requirements set out in the UK's implementation regulations are met. These include a requirement for the FSA – in deciding whether to designate – to have regard to systemic risk.
Flexibility of regulatory framework	Recognised bodies must meet recognition criteria. Authorised firms must comply with rules. Recognition criteria are pitched at a high level, and this offers recognised bodies considerable flexibility in meeting them. Rules – which apply to authorised firms – are generally more prescriptive and may permit less flexibility.
Statutory immunity	The Bill contains provisions which provide that recognised bodies, in undertaking their regulatory functions, have immunity from suit by their members for any losses.
European Union passport	A provider of infrastructure services for an investment within the terms of the Investment Services Directive (ISD) may passport services into the rest of the European Union either as a 'regulated market' (within certain parameters set out in Article 15(4)) – or as an authorised firm, provided the services they provide are ISD 'core services'. In the UK the only markets that have been notified to the Commission as regulated markets are those operated by recognised bodies. Infrastructure firms who operate as authorised firms may or may not be engaged in ISD 'core services'. It depends on the exact nature of their activities.
Available user base	Some regulated investment funds <i>have</i> to conduct some or all of their activities through the facilities of a recognised body or an ISD regulated market. This potentially restricts the investor base available to infrastructure providers operating as authorised firms.
User incentives	In the UK authorised firms are incentivised to trade through (or 'on') recognised bodies since this may result in their being subject to less onerous regulatory (e.g. capital) requirements. Where they trade using the facilities of other authorised firms there is no such incentive (unless, as a result of recognised body rules, the trade counts as being 'on' exchange).
Competition scrutiny	Recognised bodies must submit their rules to the Treasury who must send them on to the Director General of Fair Trading for review, but the Treasury decides the balance between competition issues and the interests of investor protection. Authorised firms making (contractual) rules for any trading mechanisms they provide would not be subject to such scrutiny.

Table 2 – Other factors

	Explanation
Standing	Recognised body status carries some weight in public perception terms as representing a market facility that is regulated to a certain level .
Tax advantages	Exemptions from Stamp Duty on trades in UK equities (50 basis points) are available only for exchange (i.e. recognised body) registered intermediaries, and only in respect of transactions executed on-exchange. This has been a powerful force in recent years in keeping intermediary trading on-exchange.
Non-trading income	In addition to trading fees, recognised bodies can generate revenues from selling price data to information vendors, and from admitting investments to trading. Infrastructure providers with authorised firm status may also be able to sell price data, provided that their prices are valued by market users. But the scope for an authorised firm to earn revenue from admitting investments to trading is probably limited, especially where these investments are already traded on a recognised body.

International regulatory response

- 1 This annex summarises the current regulatory response of 3 other jurisdictions (United States, Canada and Australia) to the growth of non-exchange trading systems.

United States

Reform process

- 2 In May 1997, the SEC published a Concept Release requesting public comment on a broad range of issues relating to market structure and regulation of alternative trading systems. This was followed in April 1998 by a Proposing Release.
- 3 In December 1998, the SEC adopted Final Rules on the Regulation of Exchanges and Alternative Trading Systems. These rules set out a comprehensive framework for non-exchange trading systems.

Regulatory concerns

- 4 The most significant impetus for regulatory change in the US was the rapid growth during the 1990s in the number of alternative trading systems, and their share in the overall trading of equities. By 1997 almost 20 percent of the trading in NASDAQ stocks and 4 percent of orders in securities listed on NYSE were traded on such alternative systems. (The NASDAQ figure has since risen to an estimated 30%.)
- 5 This raised concerns over price discovery and best execution as ATSS having significant trading volumes were under no obligation to provide investors with fair access to their systems. There were also concerns that surveillance for fraud and market manipulation was inadequate on such systems.

Regulatory proposals

- 6 Under the new regulatory framework, alternative trading systems can choose whether to register as an exchange or as a broker dealer, unless the SEC determines that specific volume levels have been met and it is in the public interest that they register as an exchange. If registering as a broker dealer the trading system must comply with Regulation ATS. There is no restriction on the types of securities such systems can trade.

Scope of Regulation ATS

- 7 An 'alternative trading system' is defined as 'any system that:
- constitutes, maintains, or provides a marketplace or facilities for bringing together purchasers and sellers of securities or for otherwise performing with respect to securities the functions commonly performed by a stock exchange under Exchange Act Rule 3b-16;¹ and
 - does not set rules governing the conduct of subscribers other than the conduct of such subscribers' trading on such organisation, association, person, group of persons, or system, or discipline subscribers other than by exclusion from trading.' (Regulation ATS).
- 8 A trading system will be 'governing the conduct of subscribers' if it imposes, as a condition of trading, requirements for which the trading system has to monitor the compliance of subscribers.
- 9 An alternative trading system can register as a broker dealer in the absence of an SEC determination. In making such a determination, the SEC will examine whether during three of the preceding four calendar quarters the alternative trading system had met certain volumes, e.g. forty percent or more of the average daily dollar trading volume in any class of securities.
- 10 Regulation ATS does not apply to trading systems that are registered as exchanges or have retained a limited volume exemption from regulation as an exchange. Regulation ATS also does not apply to those systems operated by a national securities association, or that trade *only* government securities,

1 The SEC defines 'exchange' as 'any organisation, association, or group of persons that:

- brings together the orders of multiple buyers and sellers; and
- uses established, non-discretionary methods (whether by providing a trading facility or by setting rules) under which such orders interact with each other, and the buyers and sellers entering such orders agree to the terms of a trade.' (Rule 3b-16).

However, the following are excluded (a – c) or exempted (d – e) from the definition of an exchange:

- a) order routing systems that only route orders to other facilities for execution;
- b) systems operated by a single registered market maker displaying its own bids and offers and the limit orders of its customers and executing trades against such orders;
- c) systems that allow persons to enter orders for execution against the bids and offers of a single viewer;
- d) alternative trading systems that comply with Regulation ATS; and
- e) alternative trading systems that are not required to comply with Regulation ATS.

commercial paper, repurchase and reverse repurchase agreements involving government securities, and certain options on government securities.

Requirements imposed by Regulation ATS

- 11 Under Regulation ATS all alternative trading systems must become members of a SRO. They must also comply with detailed notification requirements, and depending on the volume of trading taking place on the system certain transparency requirements must be met. Those trading systems with at least five percent of the trading volume in any exchange-listed, Nasdaq NM, or Nasdaq SmallCap securities must publicly disseminate their best-priced orders in those securities by including such orders in the quotation data made available to quotation vendors by national securities exchanges and national securities associations.
- 12 Additionally, trading systems must afford all non-subscribers equivalent access to the orders displayed in the public quote. Specifically, a trading system required to publicly display best priced orders because of the five percent threshold must provide members of the SRO with which it is linked the ability to effect transactions with those orders. A trading system must respond to orders entered by subscribers and non-participants with the same efficiency and speed and must not set fees that create barriers to access for non-subscribers.
- 13 If, during four of the preceding six months, the system traded 20 percent or more of the trading volume in any one security or any one category of debt security, it must also establish standards for access to its system that are applied fairly to all prospective subscribers. Trading systems meeting this 20 percent volume threshold must also determine system capacity levels, conduct stress tests of critical systems, monitor system development, review the vulnerability of systems and establish adequate contingency and disaster recovery plans.
- 14 All alternative trading systems are required to maintain records which include, among other things, audit trails of the transactions on its systems and lists of subscribers.
- 15 Alternative trading systems must also have safeguards set up to ensure that information, such as the identity of subscribers and their orders, is available only to those employees of the alternative trading system who operate the system or are responsible for its compliance with the rules. Such systems must also ensure that employees are unable to use any confidential information for proprietary or customer trading without the consent of the customer, and that employees cannot use such information for trading on their own accounts.

Registration as an exchange

- 16 Registration as an exchange may be preferred for a number of reasons, including the added prestige and investor confidence associated with registered exchanges. Additionally, registered exchanges enjoy more autonomy in their day-to-day operations than broker-dealers and they are not subject to oversight by a competing national securities exchange or association. An important element in the introduction of Reg ATS was the SEC's wish to level the playing field at *both* ends. So, in addition to increasing regulation on certain ATSs, it also relaxed certain regulatory requirements for exchanges to enable them to compete more effectively with non-exchange trading systems. Probably, the most significant relaxation was the removal of the requirement that an exchange should be a mutual organisations – thus paving the way for exchanges to demutualise and become 'for profit' organisations.
- 17 Trading systems that choose to register as exchanges must satisfy all requirements that apply to national securities exchanges. In reviewing applications for registration as a national securities exchange, the SEC will not register an exchange unless it is satisfied that it meets certain requirements, as set out in s6 of the Exchange Act 1934, some of which are set out below.
- 18 Registered exchanges must be able to carry out SRO functions – enforcing compliance by members with federal securities laws and exchange rules. If the system chooses to set listing standards, the system must have written listing and maintenance standards as well as an adequate regulatory staff to apply such standards. Rules must also be in place to prevent fraud and market manipulation from taking place. Rules must also be established to address conflicts of interest, addressing, among other things, trading on the exchange by employees, owners and exchange officials. Registered exchanges must also maintain an audit trail of the transactions on its system. Procedures for clearance and settlement of trades effected on exchange must also be set up. Exchange membership is limited to registered broker-dealers and exchanges can only trade securities registered with the SEC, though alternative trading systems registered as broker-dealers are not so constrained. Exchanges must also participate in the market-wide transaction and quotation reporting systems currently in operation. They must also ensure that they maintain sufficient systems capacity to handle foreseeable trading volume.

Canada

Reform process

- 19 In July 1999, the Canadian Securities Administrators ('CSA') published for comment two proposed National Instruments, two Companion Policies and a

Discussion Paper concerning the operation of alternative trading systems in Canada. The public comment deadline was October 1999.

- 20 These proposals include a Consolidation Plan that envisages the collection, consolidation and dissemination of all quote and trade information. This Plan also proposes to integrate all markets so that buyers and sellers have access to the best price available at the time of execution.
- 21 The Consolidation Plan will be implemented in two stages. Phase 1 – expected to be adopted by mid 2000 – would establish a data consolidator, to be chosen by the CSA, and all marketplaces would then be required to provide pre- and post-trade information to the data consolidator. Phase 1 also would require each alternative trading system to establish a link with the principal market for the securities that the system trades. Phase 2 would require that all alternative trading systems and exchanges be linked through a Market Integrator. The timing for Phase 2 integration will be determined at a later date, and may be changed to respond to market developments.
- 22 A related development is the current restructuring of exchange activities along the lines of market specialisation. Accordingly, the Toronto Stock Exchange will trade senior equities, the Montreal Exchange will trade derivatives and the Alberta and Vancouver Stock Exchanges will merge to form a Canadian junior issues market (CDNX) which will also interlist Canadian Dealing Network issues.

Regulatory concerns

- 23 Alternative trading systems have been allowed to operate in Canada on a severely restricted basis, operating only as members of an existing exchange and their trading limited to certain types of instrument. Currently available information suggests there are only three alternative trading systems operating in Canada, Instinet Canada Ltd., Versus Brokerage Services Inc. and Bloomberg Tradebook.
- 24 Particular Canadian concerns have been the fact that there is already a significant degree of internal fragmentation in the Canadian equity market as a result of trading in the ‘upstairs market’, and the adverse impact on markets that would flow if any dealers with large volumes of trading were to withdraw from exchanges and operate as alternative trading systems.
- 25 Canadian securities markets are also deeply affected by events occurring in US. Over 200 Canadian companies are interlisted between Canadian and US markets and Canadian issuers increasingly look to US markets for listing. Thus, when the SEC took action to regulate alternative trading systems in the US, it was felt that Canada should address how this would impact on Canadian markets.

Regulatory proposals

- 26 The starting point in the Canadian proposals is the concept of the 'marketplace'. This is defined as an exchange, a quotation and trade reporting system and any other person or company that:
- constitutes, maintains or provides a market or facilities for bringing together purchasers and sellers of securities;
 - brings together the orders for securities of multiple buyers and sellers; and
 - uses established, non-discretionary methods under which the orders interact with each other and the buyers and sellers entering the orders agree to the terms of a trade.
- 27 While the definition thus encompasses trading systems outside exchanges, it excludes traditional broker dealer activities such as:
- order routing systems that only route orders to other facilities for execution;
 - systems operated by a single registered market maker displaying its own bids and offers and the limit orders of its customers and executing trades against such orders; and
 - systems that only provide information to marketplace participants about other marketplace participant's trading interests, without providing facilities for execution.
- 28 While few jurisdictions across Canada have a formal definition of a 'recognised exchange', the CSA have identified certain characteristics that would require a marketplace to be regulated as an exchange. These characteristics include:
- providing a listing function;
 - providing a guaranteed minimum size order for any securities traded on the marketplace for the purposes of ensuring liquidity through intermediaries such as professional market makers;
 - setting market regulation such as rules governing the conduct of marketplace participants; and
 - disciplining marketplace participants over and above the penalty of excluding the participant from trading, *i.e.* levying fines or undertaking enforcement actions.
- 29 The proposal identifies another factor that could cause the members of the CSA to determine that a marketplace should be recognised as an exchange. The CSA will consider whether during three of the preceding four calendar quarters the alternative trading system had met certain volumes, e.g. forty

percent or more of the average daily dollar trading volume in any type of security traded in Canada.

- 30 An alternative trading system is defined as a marketplace that:
- brings together purchasers and sellers of ATS securities only;
 - is not a recognised quotation and trade reporting system or a recognised exchange; and
 - does not meet the characteristics of a recognised exchange as set out above.
- 31 An ATS Security includes listed securities, derivatives of listed securities, debt securities guaranteed by a Canadian provincial or federal government and securities listed or quoted on the American Stock Exchange, The New York Stock Exchange, The London Stock Exchange and Nasdaq Stock Market. It is expected that the definition of ATS Security will eventually be extended to include commodity futures contracts traded on an exchange.
- 32 The Canadian proposals would allow a marketplace that meets the definition of an ATS to choose one of three options. It could apply for recognition as an exchange. It could choose to become a member of an exchange and be regulated in the same manner as any other exchange member. Third, it could register as a dealer and become a member of a SRO.

Regulations applicable to both exchanges and alternative trading systems

- 33 All marketplaces must provide to the data consolidator, information regarding the total disclosed volume at each of the five best bid and ask price levels for each security traded on the marketplace. Marketplaces must also afford all non-subscribers equivalent access to the orders displayed by the data consolidator. However, when receiving an order from another marketplace, the system receiving the order can apply its own rules to the execution of the order. Also, if a marketplace charges a transaction fee greater than \$0.005 per security purchased or sold, it must disclose that fee in the bid or ask price displayed.
- 34 All marketplaces must maintain records that include, among other things, audit trails of the transactions on its systems and lists of subscribers. Additionally, those alternative trading systems meeting certain volume thresholds as well as all recognised exchanges must determine system capacity levels, conduct stress tests of critical systems, monitor system development, review the vulnerability of systems and establish adequate contingency and disaster recovery plans.

Regulations applicable only to recognised exchanges and quotation and trade reporting systems

- 35 Recognised exchanges and recognised quotation and trade reporting systems must establish written standards for granting access to trading. They must not prohibit, or limit exchange members from effecting transactions on alternative trading systems. They must also establish rules that are designed to ensure compliance with securities legislation and prevent fraud and market manipulation. They must also ensure that their members are appropriately disciplined for violations of securities laws and exchange rules. Finally, they must prepare annual audited financial statements that must be filed with the appropriate securities regulatory authority.

Regulations applicable only to alternative trading systems

- 36 Alternative trading systems, if not registered as an exchange, can carry on business only if registered as a dealer, and they must obtain membership in a self-regulating organisation. They must also comply with detailed notification requirements. Moreover, a person or company that operates such a system is prohibited from principal trading, reflecting the concern noted above that dealers with large volumes of trading might otherwise consider withdrawing from exchanges and operating as an alternative trading system.
- 37 An alternative trading system must not release subscribers trading information without the consent of the subscriber unless the system is required to disclose the information by law. Additionally, the alternative trading system must implement reasonable safeguards and procedures to protect the confidentiality of a subscriber's trading information.

Australia

Reform process

- 38 Alternative Trading Systems (ATS) can currently be authorised as a form of 'stock market' (defined below), but the principal trading venues in Australia are electronic exchanges and wholesale OTC markets. The present system of authorising stock markets is set to change with the initiation of a new regulatory framework for licensing financial product markets and service providers, conduct and disclosure of service providers and financial product disclosure. The aim of the reforms is to create an integrated regulatory framework for all financial products that would provide consistent regulation of functionally similar markets and products. A draft Bill for consultation is expected to be released late in 1999. This is part of a broader

reform of the financial system which has followed on from the Financial System Inquiry of 1997.²

- 39 The Australian Securities and Investments Commission (ASIC) is in the meantime developing proposals to accommodate the operation of ATs within the existing law. As part of this process it is considering whether it is appropriate to regulate some ATs activities by licensing the relevant operator as a securities dealer or futures broker under the Corporations Law. Public consultation about the proposals is envisaged in the near future.
- 40 Currently, persons wishing to operate a 'stock market' apply to ASIC for Ministerial approval as either a securities exchange or an exempt stock market.³ The basic requirements for approval are set out in the Corporations Law, but ASIC sets its own policy for considering applications.⁴
- 41 In a Consultative Paper of March 1999, the Treasury advocates a principles-based approach to licensing markets and clearing and settlement facilities. The paper states that 'the criteria for granting a licence will be broad and flexible to accommodate different market structures and varying services ... The way in which the requirements are to be satisfied will not be prescribed.' It also proposes licensing of persons who carry on the business of providing financial services, such as market intermediaries.

Regulatory concerns

- 42 Regulatory reforms in the financial markets in Australia have so far not specifically addressed the potential impact of ATs, as they have been part of a wider reform of the regulation of business activity across the whole market, not just financial markets. However, an overarching regulatory aim has been to promote a competitive and efficient financial system by encouraging regulatory neutrality towards different market sectors, reducing barriers to entry and creating a regulatory framework that is responsive to market changes.

Regulatory proposals

- 43 The starting point is the notion of 'stock markets', defined in the Corporations Law. A 'stock market' is broadly defined in the Law to include facilities as well as physical places, and is intended to catch a wide variety of market forms and trading arrangements, including screen based trading

2 *The Financial System Inquiry: Final Report* (1997); Companies and Securities Advisory Committee, *Regulation of On-Exchange and OTC Derivatives: Final Report* (July 1997); The Treasury, *Corporations Law Economic Reform Program Paper No. 6: Financial Markets and Investment Products* (December 1997); The Treasury, *Financial Products, Service Providers, and Markets – An Integrated Framework* (Consultation Paper, March 1999).

3 A third specialist category relates to the trading of unquoted interests in unit trusts, a professional market for facilitating buying and selling of these specialist products.

4 PS 100: Stock Markets.

systems. ASIC also interprets the definition to include information providing facilities such as bulletin boards, even if trades are not executed on the facility. However, it does not generally take enforcement action under the market provisions of the present law in relation to these services.

- 44 A financial product markets licence will be needed to operate a market facility:
- where financial products are regularly traded or information is provided about the prices at which persons may expect to trade financial products; and
 - which involve multiple buyers and sellers.
- 45 The criteria to be satisfied to obtain a licence to conduct a financial product market will be broadly expressed and flexible enough to accommodate market structures other than traditional exchanges.
- 46 The proposals also recognise the potential for regulatory overlap between the licence for a financial product market and financial service provider. An exemption power will be created, to deal with such issues, for example, where the activities of a financial service provider are sufficiently under the supervision of the relevant market.

Criteria for grant of licence to financial product markets

- 47 The Minister would have the responsibility under the new regime for granting licences. (ASIC's role in the process is not described with precision in the Consultation Paper, but it seems likely that, as now, the Minister will rely to a significant extent on ASIC for market and other technical expertise when making the relevant licensing decision.)
- 48 The relevant licensing criteria include:
- adequate arrangements regarding market supervision (this could be satisfied by appointing an independent supervisor to report on compliance, or else through a self-regulatory structure);
 - sufficient resources to conduct the market and carry out supervisory functions;
 - adequate operational rules or procedures to ensure that transactions are carried out in a fair, efficient and transparent manner (the relevant factors are listed);
 - adequate protection for retail participation, where this is provided for in the market.

- 49 An overseas financial product market which is adequately supervised in its home jurisdiction could be licensed without meeting the licence criteria if the home jurisdiction's regulatory requirements are at least equivalent to the Australian requirements and there are adequate arrangements for information sharing both with the applicant and its head office regulator. If an overseas financial product markets does not meet these criteria, it can apply on the same basis as other financial market providers.
- 50 The self-regulatory functions of market operators would be undertaken by the market itself or by an independent supervisor. In the case of exchanges, they will retain their present self-regulatory functions. However, the Treasury proposals also envisage market operators other than exchanges having a front-line regulatory role. This could take the form of an independent supervisor, appointed by the financial product market operator. Responsibility for the adequacy of that supervision would rest with the financial product market operator. However, this self-regulatory regime operates within the context of enforceable statutory rules setting basic standards for conduct of a market.

OTC markets

- 51 OTC transactions would be considered to be outside the financial product market rules as they do not have a facility operator; participants trade directly with each other, there is generally no centralised price discovery and contracts are generally bilateral and non-transferable. The implication is that ATSS would fall within the category of financial product markets unless they conform to the characteristics of an OTC market, in which case the financial service provider rules would apply instead.

Clearing and settlement

- 52 A financial product market would not be required to offer a clearing or settlement facility, but would need to notify market participants of the absence of such a facility so that they can make bilateral arrangements.
- 53 Clearing and settlement facilities would also have to obtain a distinct licence in order to operate. The criteria to be satisfied would be similarly broad to the financial products market licence criteria and, in fact, would mirror those requirements in many respects.

Potential non-exchange trading systems

- 1 This annex describes four broad categories of market facility that might be viewed as falling within a 'starting point' definition of a non-exchange trading system. In light of responses received to this paper, the FSA would want to narrow this definition to capture only those systems to which it would be appropriate to apply any specific regulatory requirements.

Electronic price-making systems

- 2 These systems facilitate the multilateral matching of customer buy and sell orders when the orders posted are 'firm' and at least one side of the trade is priced. Such systems are 'price makers' for the markets in the sense that trading prices will be determined, at least to an extent, by supply and demand within them – so prices may differ from relevant central market reference prices.
- 3 Electronic price-making systems, some of which are offering increasingly sophisticated matching algorithms, may provide continuous and/or (regular) periodic matching of orders. They may (but will not necessarily) operate on a matched principal basis, with trades going through the books of the authorised firm that provides the service. In some cases, they may also be used to route orders to other execution centres, including exchanges, if no matching order is available within the system itself.

Electronic price-taking systems

- 4 These systems normally match firm but unpriced orders (though sometimes subject to limits) on the basis of pre-determined algorithms, drawing on reference prices set elsewhere (usually the relevant central market). In other words, they are 'price takers' in the market. Generally referred to as crossing systems, they normally provide participants with anonymity and operate on a matched principal basis.

Indication of interest systems

- 5 Indication of interest systems (IoIs) usually comprise a bulletin board on which customers can indicate their willingness to trade a certain investment at a certain price. These sometimes combine with a facility for negotiation and trading with potential counterparties. Orders posted on IoIs are not 'firm'.
- 6 IoI activities are not necessarily ones to which the Act (and prospectively the Bill) will apply. They only fall to be regulated if the provider is 'making arrangements with a view to those who participate in the arrangements entering into investment transactions'. A bulletin board provider who did not take any interest in the use to which his system was put is therefore unlikely to be captured. A provider may be doing investment business where the system is positively structured to facilitate trading, but even then, the position is not clear cut.

Dealer execution systems

- 7 Dealer execution systems are facilities that display a dealer's prices and enable customers to trade at those prices against the dealer's principal book.
- 8 Dealer execution systems are distinct from the trading systems described above in that their trading functionality is bilateral rather than multilateral. But they are included in the 'starting point' definition because – depending on the nature and extent of their activities – they might be viewed as contributing to exchange market fragmentation and, potentially, to centralisation and organisation of trading in OTC investments.

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