ASIC
Australian Securities & Investments Commission

CONSULTATION PAPER 145

Australian equity market structure: Proposals

November 2010

About this paper

This consultation paper is in three parts:

- Part 1 outlines how we consider the Australian secondary market for cash equities is evolving, including the likely impact of competing exchange markets;
- Part 2 proposes market integrity rules to address some of the regulatory issues resulting from market developments. We consider these proposals are necessary irrespective of whether there are competing exchange markets. However, competition will give them greater impetus; and
- Part 3 proposes market integrity rules to address the additional regulatory issues resulting from the introduction of competition.

Further background on equity market structure and how it is changing domestically and globally is in our separate report on *Australian equity market structure* (REP 215).

Draft market integrity rules reflecting the proposals are in a separate document, *Australian equity market structure: Draft market integrity rules*.

About ASIC regulatory documents

In administering legislation ASIC issues the following types of regulatory documents.

Consultation papers: seek feedback from stakeholders on matters ASIC is considering, such as proposed relief or proposed regulatory guidance.

Regulatory guides: give guidance to regulated entities by:

- explaining when and how ASIC will exercise specific powers under legislation (primarily the Corporations Act)
- explaining how ASIC interprets the law
- describing the principles underlying ASIC's approach
- giving practical guidance (e.g. describing the steps of a process such as applying for a licence or giving practical examples of how regulated entities may decide to meet their obligations).

Information sheets: provide concise guidance on a specific process or compliance issue or an overview of detailed guidance.

Reports: describe ASIC compliance or relief activity or the results of a research project.

Document history

This paper was issued on 4 November 2010 and is based on the Corporations Act as at 4 November 2010.

Disclaimer

The proposals, explanations and examples in this paper do not constitute legal advice. They are also at a preliminary stage only. Our conclusions and views may change as a result of the comments we receive or as other circumstances change.

Contents

The consultation process

You are invited to comment on the proposals in this paper, which are only an indication of the approach we may take and are not our final policy. In a separate document, *Australian equity market structure: Draft market integrity rules*, we have set out draft market integrity rules reflecting the proposals to assist readers in assessing the proposals.

As well as responding to the specific proposals and questions, we also ask you to describe any alternative approaches you consider would achieve our objectives.

We are keen to fully understand and assess the financial and other impacts of our proposals and any alternative approaches. Therefore, we ask you to comment on:

- the likely compliance costs;
- the likely effect on competition; and
- other impacts, costs and benefits.

Where possible, we are seeking both quantitative and qualitative information. Please note any assumptions that have been made to estimate likely costs and provide source data if possible.

We are also keen to hear from you on any other issues you consider important.

Your comments will help us develop our policy on equity market structure, including competition for trading services. In particular, any information about compliance costs, impacts on competition and other impacts, costs and benefits will be taken into account if we prepare a Regulation Impact Statement: see Section N, 'Regulatory and financial impact'.

Making a submission

We will not treat your submission as confidential unless you specifically request that we treat the whole or part of it (such as any financial information) as confidential. Non-confidential submissions may be published on our website.

Comments should be sent by 21 January 2011 to:

Calissa Aldridge
Exchange Market Operators
email: marketstructure@asic.gov.au

Australian Securities and Investments Commission
GPO Box 9827
Sydney NSW 2001

What will happen next?

Stage 1	4 November 2010	ASIC consultation paper released
Stage 2	21 January 2011	Comments due on the consultation paper
Stage 3	As soon as reasonably practicable in 2011	Regulatory guide released Market integrity rules are made

PART 1: OVERVIEW

Part 1 provides an overview of this consultation paper and the separate report, *Australian equity market structure* (REP 215), and includes:

- a section called 'About this consultation paper', which describes the purpose and structure of the paper (see Section A); and
- a 'Summary of market developments and proposals', which includes a summary of how we consider equity markets are evolving with and without competing exchange markets, and our proposals to respond to these developments (see Section B).

A About this consultation paper

Who should read this consultation paper

1 The proposals in this consultation paper apply to:

(a) holders of an Australian market licence (market operators) that offer trading services in shares, managed investment schemes and CHESS Depository Interests (CDIs) admitted to quotation on the Australian Securities Exchange (ASX) (collectively, 'equity market products');[1] and

(b) participants of markets in equity market products.

2 We expect that the proposals in this consultation paper will impact:

(a) market participants, ASX and prospective operators of markets in equity market products, as the proposals apply to them directly;

(b) persons who access exchange markets through a market participant's infrastructure, as certain proposals relate to the relationship between them and market participants, including the way they access exchange markets; and

(c) frequent investors in and issuers of equity market products—the proposals relate to how equity markets in Australia will function, including protections for investors and the efficiency of the price formation process on exchange markets, which will have a potential impact on asset valuation and capital raising.

Table 8 in Section B identifies the proposals that impact each of the above.

Government's policy to introduce competition for exchange market services

3 On 31 March 2010, the Australian Government announced its support for competition between exchange markets for trading in listed products in Australia and its in-principle support for granting an Australian market licence (market licence) to Chi-X Australia Pty Limited (Chi-X).[2] The Government announced that competition is an important step in ensuring that Australia's financial markets are innovative and efficient, as well as for

[1] It is anticipated that the short sale tagging proposal (see proposal I4) will apply to a broader range of products (i.e. s1020B products in the *Corporations Act 2001* (Corporations Act)).

[2] The Hon Chris Bowen MP, Minister for Financial Services, Superannuation and Corporate Law, Media Release No. 032, *Government announces competition in financial markets*, 31 March 2010, http://mfsscl.treasurer.gov.au/DisplayDocs.aspx?doc=pressreleases/2010/032.htm&paragraphsID=003&min=ceba&Year=&DocType=0.

the development of Australia as a leading financial centre. The decision was commensurate with Recommendation 4.5 of the Johnson Report,[3] which encourages competitive, efficient and innovative equity markets.

4 The announcement of 31 March 2010 followed the Government's announcement on 24 August 2009 that ASIC would take over the supervision of real-time trading on Australia's domestic licensed markets,[4] which the Government said was a necessary step in the process towards considering competition between market operators. Responsibility for market surveillance shifted from ASX and a number of other domestic market operators to ASIC on 1 August 2010.

5 We note that the new Government has confirmed that competition is still its policy subject to an appropriate regulatory framework being put in place by ASIC.

ASX–SGX merger announcement

6 On 25 October 2010 ASX and Singapore Exchange (SGX) entered into a merger implementation agreement.[5] The issues raised by the merger implementation agreement are distinct from those addressed in this consultation process, and the merger proposal will be subject to various government, regulatory and shareholder approvals. For these reasons, this paper does not deal with issues associated with those approvals. See REP 215, paragraph 83, for a more detailed discussion of cross-border exchange consolidation.

Market licence applications

7 The *Corporations Act 2001* (Corporations Act) requires that a person must only operate a financial market[6] in this jurisdiction if they have a market licence or are exempt from the requirement to hold a licence. During the 2007–08 financial year, three entities—AXE-ECN Pty Limited (AXE), Chi-X and Liquidnet Australia Pty Limited (Liquidnet)—applied for market licences to offer trading services in securities listed on ASX.

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[3] Australian Financial Centre Forum, *Australia as a financial centre: Building on our strengths* (Johnson Report), November 2009, www.treasury.gov.au/afcf/content/final_report.asp.
[4] The Hon Chris Bowen MP, Minister for Financial Services, Superannuation and Corporate Law and the Hon Wayne Swan, Treasurer, Media Release No. 013, *Reforms to the supervision of Australia's financial markets*, 24 August 2009, http://ministers.treasury.gov.au/DisplayDocs.aspx?doc=pressreleases/2009/013.htm&paragraphsID=003&min=ceba&Year=2009&DocType=0.
[5] ASX–SGX Joint News Release, *ASX and SGX combine to create the premier international exchange in Asia Pacific: The heart of global growth*, 25 October 2010, www.asx.com.au/about/pdf/20101025_asx_sgx_media_release.pdf.
[6] A financial market is a facility through which offers to acquire or dispose of products are regularly made or accepted.

8 ASIC consulted in July and November of 2007 (CP 86[7] and CP 95[8] respectively) on the market licence applications and on minimum conditions for market operators to allow competition to develop efficiently and without adverse effects on the market as a whole. We also published independent economic advice we commissioned about the costs and benefits of competition between markets.[9] A summary of the proposals in CP 95 and the feedback we received is at Appendix 1.

9 At this stage, Chi-X is the only applicant actively pursuing its market licence. See Appendix 2 of this paper for further details.

Recent market developments

10 Markets have evolved considerably since we consulted in 2007. These developments are summarised in Section B of this consultation paper and discussed in detail in REP 215. We are interested in your feedback on whether there are any other key market structure developments that we have not commented on in this consultation paper or in REP 215.

Purpose and structure of this consultation paper

11 In this consultation paper, we are revisiting the issues raised in our consultation papers in 2007, as well as addressing recent market developments.[10] Irrespective of the granting of new market licences, we are proposing a number of market integrity rules that we consider are necessary to keep pace with technological developments and global financial market trends. These proposals are equally important in an environment with competing markets.

Part 1: Overview

12 Part 1 provides an overview of this consultation paper, and includes:

(a) a section called 'About this consultation paper', which describes the purpose and structure of the paper (see Section A); and

(b) a 'Summary of market developments and proposals', which includes a summary of how we consider equity markets are evolving with and without competing exchange markets (which is also discussed in more detail in REP 215), and our proposals to respond to these developments (see Section A).

[7] Consultation Paper 86 *Competition for market services: Trading in listed securities and related data* (CP 86).
[8] Consultation Paper 95 *Competition for market services: Response to CP 86 and further consultation* (CP 95).
[9] Report 106 *Economic assessment of competition for market services* (REP 106).
[10] This paper does not discuss issues relating to post-trade infrastructure, such as clearing and settlement.

Part 2: Response to recent and likely market developments

13 Part 2 outlines:

(a) *the regulatory setting*—a description of the existing regulatory framework for market operators and market participants (see Section C); and

(b) *the scope of the proposals*—details of the scope of our proposals, including the products to which our proposals apply and the persons to whom they apply (see Section D).

14 Part 2 also outlines the regulatory proposals that we consider are necessary whether or not a competing market operator enters the market. The introduction of competition for exchange market services will provide greater impetus for these changes. Part 2 addresses the following issues:

(a) *extreme price movements*—such as that experienced on 6 May 2010 in the United States (US) (see Section E);

(b) *electronic trading requirements*—it is important that there are appropriate systems and controls in place to mitigate against disorderly trading conditions (see Section F);

(c) *best execution*—market participants already have choice in where and how to execute client orders and these decisions should be based on the best interests of clients (see Section G);

(d) *pre-trade transparency and price formation*—to protect the price formation process on-market and reward investors for posting limit orders (see Section H); and

(e) *market integrity measures and regulatory reporting*—to monitor new trading developments and help to maintain the integrity of the Australian market (see Section I).

Part 3: Response to competing exchange markets in Australia

15 The proposals in Part 3 address the additional regulatory issues that arise in a market environment with multiple exchange markets offering trading services in the same products. The proposals address the following issues:

(a) *post-trade transparency*—to ensure consistent information is available to contribute to price formation and to evidence execution performance (see Section J);

(b) *consolidation of pre-trade and post-trade information*—irrespective of where the information is generated (see Section K);

(c) *market operators: other obligations*—coordination between market operators to ensure trading halts and other events are managed consistently (see Section L); and

(d) *market participants: other obligations*—to maintain market integrity (see Section M).

Appendices and key terms

16 At the end of this consultation paper, there are five appendices, which provide:

(a) a summary of our 2007 position on competing markets and feedback to CP 95 (see Appendix 1);

(b) an overview of Chi-X's application for a market licence (see Appendix 2);

(c) guidelines on the best execution reporting requirements (see Appendix 3);

(d) the pre-trade and post-trade transparency data requirements, which will enable harmonisation of data published by each execution venue (see Appendix 4); and

(e) standards for data consolidator/s (see Appendix 5).

17 The consultation paper also includes a list of key terms.

Cost recovery regime

18 This consultation paper does not deal with proposals for a cost recovery regime to cover ASIC's additional market supervision costs. The fees regulations[11] to enable the recovery of ASIC's costs of supervision from the industry do not contemplate multiple market operators and recent market developments. The Government will need to amend the fees regulations in order to levy competing market operators, and will consult separately on the costs that need to be recovered and the basis for their recovery, including from whom and over what time period.

Penalties

19 This consultation paper does not propose specific penalties for contravention of the proposed market integrity rules. However, we are seeking feedback on the appropriate maximum penalty to be set for contravention of each proposed market integrity rule: see Section D. We intend to discuss possible penalties for each market integrity rule with participants and market operators during the consultation process.

[11] Corporations (Fees) Amendment Regulations 2010 (No. 3).

Feedback sought

20 We are seeking feedback on:

(a) specific proposals for market integrity rules—identified as 'proposals';

(b) the draft market integrity rules that reflect the proposals (see the separate document *Australian equity market structure: Draft market integrity rules*); and

(c) issues that require further consideration—identified as 'issues'. We note that if we were to develop proposals to address certain of the issues, legislative amendments may be required.

Steps and timing for implementation

21 There are a number of steps in ASIC assuming responsibility for supervision of real-time trading on ASX and putting in place a framework for competition: see Table 1.

Timing for competition and implementation

22 Based on our consideration of the comments we receive in response to this consultation paper, we will review and confirm the timetable in early 2011. We are working towards putting in place a framework for competition as early as practicable in 2011. We recognise that certain proposals in this consultation paper are not mandatory for the commencement of competition for exchange market services (although competition will provide greater impetus for the proposals). We have identified in Section B, Table 7, those that we consider are necessary from day one. We are seeking feedback on appropriate transitional arrangements for the remaining proposals.

Table 1: Steps to transferring supervision and implementing competition

Step	Timing and process
Transfer of ASX supervision, which has meant making minimal changes to the existing supervision infrastructure and rule framework.	Implemented on 1 August 2010.
After the transfer, re-examine the rule framework for supervision to ensure it continues to meet the requirements of the Australian market and harmonise the rules across markets.	The immediate issues are in Part 2 of this paper. The broader review of the rules is occurring separately: see paragraph 127.
Put in place the regulatory framework for the introduction of competing exchange markets. Any ASIC market integrity rules are subject to Ministerial consent and Parliamentary disallowance.	The immediate issues are in Part 2 and Part 3 of this paper.
Establish an appropriate cost recovery model. The Government will need to amend the fee regulations in order to levy competing market operators: see paragraph 18.	The Government will consult separately on the costs that need to be recovered.

B Summary of market developments and proposals

Key points

Equity markets are undergoing considerable change. There are regulatory issues that need to be addressed irrespective of whether competition in market services is introduced.

In considering market structure issues, we are guided by ASIC's priorities—to build confidence in markets, protect investors and facilitate capital flows.

We propose a regulatory approach that maximises market efficiency and opportunities for innovation, while mitigating risks to price formation and delivering the best outcome for investors.

Competition will bring both benefits and challenges—innovation, lower trading fees and narrower spreads; and fragmentation and a need for market operator cooperation.

ASIC is well prepared to regulate multimarket activity and we will thoroughly consult with industry.

23 Equity markets globally are undergoing considerable change. They are now overwhelmingly electronic and automated. Technology has increased the speed, capacity, automation and sophistication of trading for market operators and market participants. It has also opened the door for new types of market participants with innovative trading strategies. High-speed traders are becoming more prevalent. These trends are driving market structure, irrespective of whether competition between market operators is introduced.

24 In responding to these issues, we are guided by ASIC's priorities to:

(a) build confidence in the integrity of Australia's capital markets;

(b) protect retail investors; and

(c) facilitate international capital flows.

We are committed to ensuring the Australian equity market has effective price formation and provides fair, orderly and transparent trading of financial products for fundamental investors,[12] both small and large. This will in turn facilitate efficient capital raising for companies.

25 We are proposing a regulatory approach to reflect changes in equity market structure, including potential competition in market services. We aim to maximise market efficiency and opportunities for innovation, while

[12] A fundamental investor is a person that buys or sells a security based on an assessment of the intrinsic value of the security.

mitigating risks to price formation and delivering the best outcome for investors. We will continue to focus on the interests of listed companies, fundamental investors and Australia's competitiveness as a regional financial centre. We also have the opportunity to put in place a robust framework for competition from the outset to provide certainty to market participants so they can better plan their business activities, including any information technology (IT) investments.

26 We have looked closely at arrangements overseas, including lessons learned from events like the 'flash crash' of 6 May in the US. We want to build on the strengths of the Australian market, such as its existing whole-of-market supervisory arrangements and its history of sound operation.

27 We expect competition to deliver more innovation in products and services, lower trading fees and narrower spreads. This means investors should have more choice and better services throughout the transaction cycle and cheaper execution costs. Recent developments in technology mean that investors are also likely to benefit from a faster and more efficient trading experience.

28 We expect recent market developments and competition to raise market integrity issues too. The 'flash crash' of 6 May in the US is a call for close analysis. It was a reminder of the speed markets can move and the need for market operators and regulators to cooperate to deal with these movements. Investors should be able to have confidence that they will be able to buy and sell their shares at a fair and efficient price on an orderly market. Companies should have confidence that share prices reflect their value.

29 Competition between market operators and the recent international trend towards trading in 'dark pools' (i.e. non-pre-trade transparent electronically accessible pools of liquidity) will change the price formation process in Australia. Fragmented data across venues will need to be consolidated. We need to balance the benefits to individual investors of trading in the 'dark' against the public good of contributing to price formation. This is particularly important because the market prices of products are used by investors to value their assets and by companies to raise funds.

30 ASIC's market surveillance duties have expanded considerably recently, and there has been an associated expansion in staff and expertise. We plan to be well prepared to regulate multimarket activity and will thoroughly consult with industry. We aim to implement a regulatory approach that supports the supervisory function and keeps pace with market developments.

The Australian equity market today

Execution venues

Exchange markets

31 Exchange markets are a type of execution venue that enables trading in listed products, including via a 'central limit order book' (CLOB). Many exchange markets also offer listing services for companies. They play an important role in business capital formation and household allocation of savings. We view the principal functions of exchange markets as offering a cost-effective mechanism for companies to raise funds and providing a venue for fair, orderly and transparent trading of listed securities once they are issued.

32 Exchange markets offer many benefits, including:

(a) for companies (issuers)—lower capital costs and increased accessibility to their securities;[13]

(b) for investors—security, fairness and efficiency in managing their investments. A deep liquid market, with an efficient transparent price formation mechanism, enables investors to value their assets and manage their risk; and

(c) for the community as a whole—the efficient marrying of the needs of issuers and investors and the timely and efficient repricing of risk through trading on an exchange market are important drivers of economy-wide resource allocation and ongoing management of systemic risks.

33 Since 1987[14] trading on the ASX exchange market has either taken place via:

(a) the electronic CLOB, where bids and offers are matched on price–time priority. A CLOB allows maximum order interaction, where demand can meet supply in the most efficient manner; or

(b) the crossing market, which includes both on-order book crossings (must be at or within the spread) and off-order book crossings (large trades at any price). The crossing market assists the efficient functioning of the equity market by allowing large orders to be executed without causing dramatic price impacts on the CLOB.

Other types of execution venues

34 More recently, a range of other types of execution venues[15] has become available, including new venues offered by ASX and by other parties: see

[13] Not all exchange markets or execution venues offer primary listings services. For example, ASX, Asia Pacific Exchange and the National Stock Exchange of Australia provide this service, but Chi-X does not intend to provide this service.
[14] ASX launched computer-based trading (SEATS) for a limited range of ASX-listed stocks in 1987, with the remaining stocks rolled out over subsequent years.

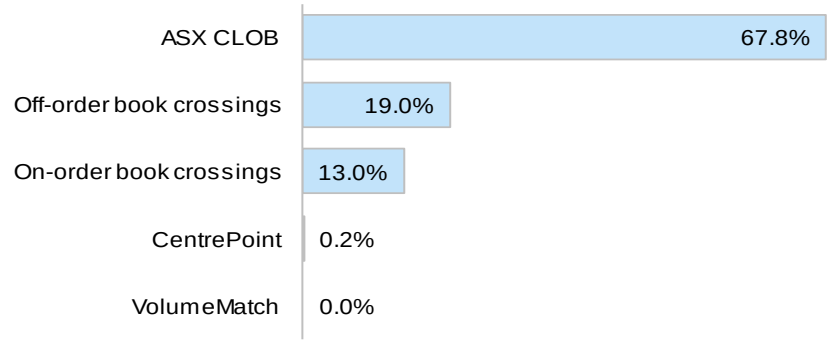
Figure 1. The following venues operate under ASX crossing rules and are not pre-trade transparent (i.e. they are dark pools):

(a) CentrePoint is an ASX-operated venue that references the midpoint of the bid–ask spread on ASX's CLOB. Trades execute in time priority.

(b) VolumeMatch is an ASX-operated venue that facilitates the matching of anonymous large orders (over $1 million) with reference to the last price on ASX's CLOB.

(c) There are a number of dark crossing systems offered by market participants and third parties for buy-side firms (e.g. Liquidnet and ITG POSIT) or that automatically match client order flow (e.g. UBS's Price Improvement Network (PIN) and Goldman Sachs' Sigma X).

Figure 1: Trading breakdown, August 2010[16]



Source: ASX data[17]

Interconnection of trading on ASX and ASX 24

35 Trading in certain products on ASX and ASX 24 (formerly the Sydney Futures Exchange) are intrinsically linked. This is because certain ASX 24 futures and options contracts are priced on the basis of the expected future price movements of the underlying product traded on ASX. Futures and options contracts may be linked to an individual product (e.g. a derivative over BHP Billiton) or a basket of products (e.g. the ASX 24 SPI 200 futures contract).[18]

36 This interconnection means that price movements on ASX or in certain ASX securities flow through to trading on ASX 24 and vice versa. This occurs

[15] An execution venue is a facility, service or location on or through which transactions in equity market products are executed and includes each individual order book maintained by a market operator, a crossing system and a participant executing a client order against its own inventory otherwise than on or through an order book or crossing system.
[16] Figure 1 illustrates the breakdown of trades done on the CLOB, CentrePoint, VolumeMatch and via crossings. It has not been possible to isolate the proportion of dark crossing systems. They are included in the crossing figures.
[17] ASX Market Announcement, *ASX Group monthly activity report*, ASX Limited, August 2010, www.asx.com.au/about/pdf/20100906_asx_group_monthly_activity_report_august_2010.pdf.
[18] An ASX 24 SPI 200 futures contract enables investors to trade movements in the S&P/ASX 200 Index in a single transaction, thereby allowing exposure to Australia's top 200 companies without having to buy or sell shares in every company in the index.

both in normal trading conditions and when there are extreme price movements. Therefore, any controls to address anomalous order entry and to manage volatile trading conditions should be coordinated between derivative markets and markets trading the underlying securities.

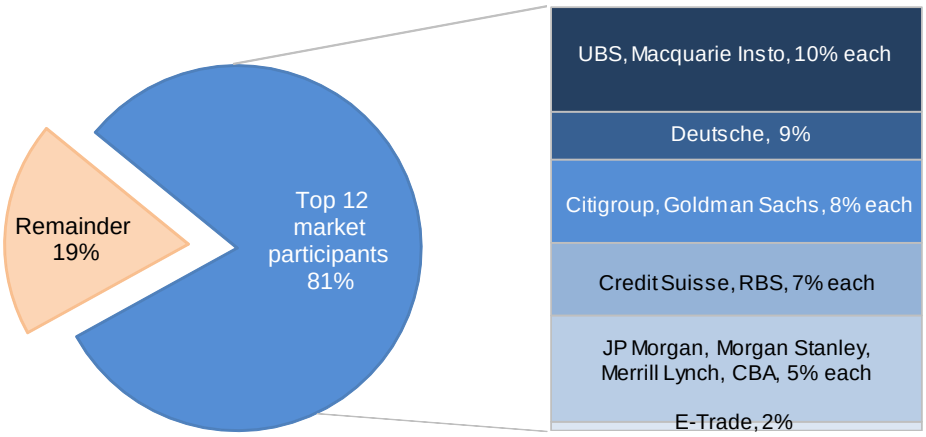
37 While the proposals in this consultation paper apply to equity markets, many are also relevant for trading in futures. We are seeking feedback on which proposals could apply to futures. In any event, we propose that operators of equity markets and futures markets should cooperate in matters such as responding to extreme price movements.

38 This linkage between equity and derivative markets is discussed further in REP 215, paragraphs 297–305.

The broking industry

39 There is substantial competition in the broking industry. There are approximately 90 ASX market participants, and around an additional 150 indirect participants that use market participants' authority to trade on behalf of their clients as a substantial part of their business model. The market is relatively concentrated, with the top 12 market participants accounting for approximately 81% of the market and the top three market participants (UBS, Macquarie and Deutsche Bank) accounting for close to 30% of the market: see Figure 2.

Figure 2: ASX participant market share of equity value, 2009–10



Source: IRESS Market Technology Limited (IRESS) data

Investors

40 Retail investors consistently represent 15–20% of equity market turnover. The private sector fund management industry is reasonably concentrated with five fund managers (Commonwealth Bank, National Australia Bank, AMP Ltd, Macquarie Group and ANZ Bank) accounting for approximately 70% of funds under management.[19]

Recent and likely equity market developments

41 Stakeholders have benefited from technological developments that have improved the efficiency of markets. Trading costs, including exchange and brokerage fees, bid–ask spreads and settlement charges, have fallen in many jurisdictions, including Australia.[20]

Possible ASX and SGX combination

42 ASX and SGX have entered into a merger implementation agreement. The transaction will be subject to various regulatory and shareholder approvals both in Australia and Singapore. This type of cross-border exchange market consolidation is a growing trend (NYSE Euronext is a recent example): see REP 215, paragraph 83, for more detail.

6 May 'flash crash'

43 The 6 May 'flash crash' in the US was a reminder of the speed and interconnection of markets, and the need for market operators and regulators to cooperate to deal with significant market movements. US equity markets experienced an extreme price decline, with some stocks falling to US$0.01 before bouncing back again.

44 US regulators have described the event as a 'liquidity crisis' stemming from a large computer-driven order in the E-mini S&P 500 futures contract (E-mini) on the Chicago Mercantile Exchange (CME). The sell order triggered automated selling in the E-mini and the other most actively traded stock index instrument—the S&P 500 exchange-traded fund. Sentiment quickly

[19] IBIS World Report, *Funds management (except superannuation funds) in Australia*, IBIS World, June 2010, www.ibisworld.com.au/industry/default.aspx?indid=1822.

[20] ASX has reduced its trading fees from a headline fee of 0.28 basis points (bps) to 0.15 bps. On-market and off-market crossings are down from 0.15 bps to 0.10 bps and 0.075 bps to 0.05 bps respectively: see Market Announcement, *ASX fees and activity rebates*, ASX Limited, 3 June 2010, www.asx.com.au/about/pdf/20100603_asx_fees_and_rebates.pdf.

flowed through to trading in individual stocks. This was in an environment where prices were down for the day and liquidity was already thin.[21]

45 Factors that exacerbated the fall included a propensity for participants to place 'market orders'[22] rather than 'limit orders'[23] and market operators responding in different ways. The Chairman of the US Securities and Exchange Commission (SEC), Mary Schapiro, has noted that 6 May shook investor confidence. She cited a decline in individual investor participation in the equity markets and stated that 6 May 'was clearly a market failure'.[24]

46 We have a number of proposals that respond to 6 May in Sections E and F. See REP 215, paragraphs 91–117, for a more detailed discussion of what happened on 6 May and what it means for market integrity.

Algorithmic trading

47 One of the most significant recent developments in Australian and global equity markets has been the dramatic growth in automated electronic trading. Developments in technology and execution venues have facilitated this growth.

48 The use of algorithms (automated electronic trading activity whose parameters are set by predetermined rules) in Australia has grown rapidly over recent years and we expect the growth to continue. Although it is not possible to measure directly, ASX estimated in its February 2010 review, *Algorithmic trading and market access*[25] (ASX Review), that algorithms account for approximately 30–40% of ASX cash equity turnover.

49 Algorithms are used for a variety of purposes, the most common of which are outlined in Table 2.

50 The ASX Review outlined a number of intended actions for ASX and recommendations for consideration by ASIC relating to algorithmic trading and market access. We have had regard to the recommendations in developing the proposals in this consultation paper: see Section F.

51 For further details about algorithms and their purposes, see REP 215, paragraphs 122–126.

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[21] Joint Report, *Findings regarding the market events of May 6, 2010*, US Commodity Futures Trading Commission and US Securities and Exchange Commission (SEC), 30 September 2010, www.sec.gov/news/studies/2010/marketevents-report.pdf.
[22] A market order is an order at the best price currently available.
[23] A limit order is an order for a specified quantity of a product at a specified price or better.
[24] ML Schapiro, *Strengthening our equity market structure*, Address by SEC Chairman, Economic Club of New York, New York, 7 September 2010, www.sec.gov/news/speech/2010/spch090710mls.htm.
[25] ASX Review, *Algorithmic trading and market access arrangements*, ASX Limited, 8 February 2010, www.asx.com.au/about/pdf/20100211_review_algorithmic_trading_and_market_access.pdf.

Table 2: Types and purposes of trading algorithms

Name	Purpose
Trade execution algorithms	Designed to minimise the price impact of executing trades of large volumes of products by 'shredding' orders into smaller parcels and slowly releasing these into the market.
Strategy implementation algorithms	Designed to read real-time market data and formulate trading signals to be executed by trade execution algorithms.
Stealth/gaming algorithms	Designed to take advantage of the price movement caused when large trades are filled, and also to detect and outperform other algorithmic strategies.

High-frequency trading

52 Specialised forms of high-speed algorithmic trading are emerging—that is, the use of high-speed computer programs to generate, route and execute orders. High-frequency trading (HFT) is a subset of this. While there is not a commonly agreed definition of HFT, it is characterised by:

(a) the generation of large numbers of orders, many of which are cancelled rapidly; and

(b) typically holding positions for very short time horizons (i.e. ending the day with a zero position).

53 The ASX Review suggests HFT accounts for 3–4% of turnover. Feedback ASIC has received from the industry and comments in the press suggest this figure may now be higher.

54 High-frequency traders (HFTs) use a variety of trading strategies—however, they can be broken into three broad categories: see Table 3.

Table 3: HFT strategies

Name	Description of strategy
Statistical arbitrage	Seeks to exploit pricing inefficiencies either between related products or markets.
Electronic liquidity providers	Involves making a two-sided market with a view to profiting by earning the bid–ask spread.
Liquidity detection	Seeks out whether there are large orders existing in a matching engine. Some liquidity detection strategies are described as 'predatory' in nature.

55 ASX has announced plans for a new, even faster execution venue, called 'PureMatch', which is designed for HFTs and other users of high-speed trading technology.[26] The types of entities that may use this venue include proprietary trading entities (e.g. GETCO), proprietary trading desks within a multiservice market participant (e.g. Goldman Sachs) and hedge funds (e.g. Renaissance Technologies).

56 We expect growth in high-speed trading to lead to greater emphasis on latency,[27] demand for increased market capacity, enhanced co-location[28] facilities, new order types, and increased demand for direct electronic access (DEA)—that is, access to markets via the connection of a market participant.

57 An expansion in the number of users of DEA will give rise to a need to further consider market participant risk controls.

58 HFT potentially provides benefits, such as contributing to price formation, keeping prices similar between venues, the provision of liquidity and the tightening of spreads (although potentially with lower depth at the best prices). It also raises a number of important questions, including questions about:

(a) fairness—HFTs' speed of access to markets and data compared with other investors;

(b) the impact of HFTs' speed and volume of order entry and cancellation on price formation;

(c) HFT's impact on long-term investor confidence in markets;

(d) HFT's impact on data and data management costs; and

(e) the necessary risk controls.

59 There is a more detailed discussion about HFT and the impact it may have on market quality in REP 215, paragraphs 127–172. We seek feedback about its prevalence and impact in Australia in Section F.

Other technology-driven developments

60 In addition to enhancements for automated trading, ASX is responding to demands for greater speed and capacity by upgrading to a new trading system expected to be launched in November 2010, called 'TradeMatch', which will provide enhanced functionality to the existing CLOB.[29] This new technology is expected to substantially reduce latency and boost capacity.

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[26] ASX Market Announcement, ASX Fees and Activity Rebates, ASX Limited, 3 June 2010, www.asx.com.au/about/pdf/20100603_asx_fees_and_rebates.pdf.
[27] Latency is the time it takes for data to get from one point to another.
[28] Co-location is where market participants and other service providers locate their systems with the exchange matching engine in a single data centre.
[29] ASX Market Announcement, *ASX fees and activity rebates*, ASX Limited, 3 June 2010, www.asx.com.au/about/pdf/20100603_asx_fees_and_rebates.pdf.

61 The emphasis on speed has also led to the demand for co-location services and low-latency data feeds. ASX has announced plans to build a new co-location facility outside the Sydney central business district by August 2011.[30] Data and system vendor IRESS has announced that it will be a foundation customer of the new ASX co-location facility. IRESS and Chi-X have also agreed to co-locate.[31] In some cases overseas, different execution venues have co-located in 'neutral' centres to reduce latency between markets.[32]

62 Technology is reducing data processing and communication costs, as well as facilitating faster data processing and communication speeds. This has enabled smaller order sizes, finer pricing between buy and sell orders (e.g. narrowing the bid–ask spread) and faster order execution. The accuracy and speed of access to pre-trade and post-trade data will become increasingly important, as well as the impact of increasing volumes on system capacity.

63 Investors and market participants will increasingly need to make order routing decisions. The existence of multiple venues (e.g. CentrePoint, VolumeMatch and various crossing systems) means there is more choice in where and how market participants execute client orders. It is important that these execution decisions are made on the basis of achieving the best result for the client. ASX has indicated that it will launch a smart order router (SOR),[33] called 'ASX Best', to enable ASX market participants to route orders to ASX for execution within the expanded ASX execution venue offering.[34] It is likely that larger market participants will develop their own SOR tools. Section G outlines our best execution proposal, which will require market participants to utilise tools like SORs. REP 215, paragraphs 173–207, elaborates on the purpose of best execution.

64 These developments may flow through to changes to middle office, back office and order management systems.

Dark pools and internalisation

65 There has been a proliferation of dark pools overseas and an increasing volume of trading that is executed on these venues. In the US, for example, the number of dark pools has tripled since 2002 and the volume of trades

[30] ASX Market Announcement, *New data centre for ASX*, ASX Limited, 10 June 2010, www.asx.com.au/about/pdf/20100610_new_data_centre_for_asx.pdf.
[31] IRESS Media Release, *IRESS launches low-latency trading eco-system in Australia*, 29 October 2010, www.iress.com.au/news.aspx.
[32] This is to reduce latency when routing between markets. For example, National Association of Securities Dealers Automated Quotations (Nasdaq), Better Alternative Trading System (BATS), International Securities Exchange (ISE) and others use BT Radianz's data centre in the US.
[33] An SOR is an automated process of scanning various execution venues to determine which venue will deliver the best outcome on the basis of predetermined parameters.
[34] ASX Market Announcement, *ASX fees and activity rebates*, ASX Limited, 3 June 2010, www.asx.com.au/about/pdf/20100603_asx_fees_and_rebates.pdf.

executed through dark pools has more than doubled in the three years from 2007 to 2010.[35] In addition, a further 17.5% of trades are internalised by 'broker–dealers' without any pre-trade transparency.[36] There is recent evidence that the combination of increased volume of internalisation and trading on dark pools in the US have impacted price formation (i.e. resulting in wider spreads and less depth of liquidity): see Section H and REP 215, paragraphs 208–247.

66 While we do not expect a proliferation of dark pools to the same extent as experienced in the US, we do expect dark pool and other internalisation activity to rapidly grow in Australia. We understand that a number of market participants have plans to develop dark pools and/or enhance their internalisation activity, which taken together, we consider could impact the price formation process on public markets in Australia. This could be to the detriment of listed companies and fundamental investors who rely on prices on pre-trade transparent markets (and prefer deep liquid markets) for asset valuation, to inform investment decisions and to support fundraising.

67 To manage this risk we propose common pre-trade transparency market integrity rules that would apply equally to market operators and market participants that are designed to promote the use of pre-trade transparent orders. These arrangements will limit the anticipated rapid rise in dark pools and internalisation and the potential to have a negative impact on the price formation process. See Section H for our proposals relating to pre-trade transparency and to address the impact of dark pools on price formation.

68 We note that there are also dark pool developments in the region. Chi-East (a Chi-X Global and SGX joint venture) received approval from the Monetary Authority of Singapore in October 2010 for a dark pool service for Asian investors that will include ASX 200 shares.[37]

Investors

69 Algorithmic trading strategies have allowed large institutional orders to be transformed from single trades on non-pre-trade transparent execution venues to a multiplicity of small trades on pre-trade transparent execution venues, which can reduce market impact. The increased use of algorithmic strategies may also be a response to avoiding detection by HFTs. The proliferation of HFT has meant that in the US 'funds must now employ dark pools, crossing networks, smart order routers, and other technologies to protect … investors' interest'.[38]

[35] TABB Group Liquidity Matrix, www.tabbforum.com.
[36] SEC Concept Release, *Equity market structure* (Release No. 34-613358), SEC, 13 January 2010.
[37] Chi-East News Release, *Chi-East receives regulatory approval to launch independent, pan-Asian, non-displayed trading venue*, Chi-East Pte Ltd, 4 October 2010.
[38] SEC, *Statement of Kevin Cronin*, Global Head of Equity Trading, Invesco, SEC Market Structure Roundtable, 2 June 2010, www.sec.gov/comments/4-602/4602-11.pdf.

70 Much retail investor equity market activity is now being transacted online through 'limited advice' or 'execution only' market participants at lower commissions than previous 'full service' models. Retail investors are and should continue to benefit from better prices as algorithms drive spreads tighter.

71 More choice in execution venues and incentives for order flow increase the risk that market participants may not deal with clients on terms most favourable to clients. This risk exists currently, given there are already multiple execution venues (i.e. provided by ASX and crossing systems), and it may increase as more execution venues emerge and, with competition, as market operators compete more intensively for order flow. We need to formalise a best execution obligation to apply to market participants. Australia stands out among advanced jurisdictions in not having such a requirement at present. Our proposal is at Section G.

Listed companies

72 The price formation process is important to listed companies. Capital raising is most efficient when asset prices are based on full information and are stable—as investors can have confidence in the valuation of the assets. There are two key recent trends that may impact the price formation process and that may therefore impact listed companies:

(a) HFT—we expect that the trend towards more automated trading and HFT should increase liquidity, which during normal trading conditions should smooth prices and contribute to price stability. However, when liquidity is thin, automated trading may contribute to more price volatility and may increase the cost of capital; and

(b) dark pools—there is a risk that the price formation process may be undermined if too much liquidity moves into dark pools, which also has the potential to increase the cost of capital.

73 We seek your feedback on the impact of HFT and dark pools on price formation, and therefore on listed companies, in Section F and Section H. We also highlight in Table 5 that the impacts on companies may vary by their size.

Surveillance

74 There is a risk to market integrity and market orderliness if ASIC is not well placed to adequately monitor the market conduct of participants and traders that deploy emerging electronic trading strategies.

75 Data management needs will increase (both due to increased volumes and complexity). Mechanisms will be required to monitor HFT and other high-speed trading strategies and dark pool trading. Broker compliance operations

can also be expected to experience a similar increase in the complexity of their business. This challenge exists currently and has the potential to be greater with market developments and competition. To manage this risk ASIC will need an enhanced market surveillance capability: see Section I.

76 We have been liaising with other regulators in the region, as well as in the US, Canada and Europe, to better understand and respond to these challenges and we intend to continue this dialogue.

Competition for exchange market services

Overseas experience

77 Regulatory reforms in the US, Canada and Europe[39] have resulted in substantial competition for trading services in these markets. We expect that competition for exchange market services in Australia will compound the benefits and challenges discussed above.

78 There has been a proliferation of new execution venues. In the US there are around 50 execution venues, in Europe over 100 venues and in Canada nine venues. In Europe and the US many of these venues are dark pools. The growth in new venues and dark trading has resulted in significant fragmentation of order flow. See Table 4 for a summary of overseas experience.

[39] Regulation National Market System (Reg NMS) and Regulation Alternative Trading System (Reg ATS) in the US, the ATS regime in Canada and Markets in Financial Instruments Directive (MiFID) in Europe.

Table 4: Summary of overseas experience with competing exchange markets

Issue	Lessons from overseas experience
1. Fragmentation of liquidity	Too much fragmentation and non-pre-trade transparent trading can reduce the quality of price formation on public pre-trade transparent markets. It is important to incentivise trading in pre-trade transparent execution venues and to limit the volume of dark trading.
2. Fragmentation of prices	Market forces will not necessarily lead to consolidation of prices across all markets. At a minimum, investors and listed companies should be able to access best bid and ask prices for each pre-trade transparent market and all post-trade information at reasonable cost, and regulators should play a role in delivering this outcome.
3. Best execution	With more choice and incentives for order flow, it is important to have a clearly defined best execution rule, which ensures client interests are protected. Investors must have sufficient access to information to allow them to monitor their broker's execution performance, and regulators must be able to monitor and enforce the best execution rules.
4. Consistent treatment	It is important that there is equivalent treatment for parties undertaking similar activities. This will limit opportunities for regulatory arbitrage.
5. Surveillance and risk controls	Surveillance across multiple markets increases the complexity of monitoring. Regulators need sufficient information, including about the origin of orders and trades. Standardised market integrity risk controls, such as circuit breakers, and cooperation are essential.
6. Reduction in trading fees	The growth in new execution venues has led to significant competition for order flow overseas, resulting in aggressive fee reductions for trading. New pricing models have been implemented to attract different types of order flows and there are frequent fee changes and fee 'specials' aimed at attracting order flow.
7. Significant reductions in bid–ask spreads	In Canada, bid–ask spreads fell from 15 bps in early 2008—when competition really began—to 10 bps by mid-2010.[40] These benefits started with the larger stocks and are flowing through to smaller stocks. In the US, 'reduced transaction costs have enabled a mutual fund investor to reasonably expect an investment balance that is perhaps 30% higher than what they could have expected only a decade ago'.[41] However, in some markets this has been offset by increased search costs. This is true in Europe where fragmentation is compounded by a lack of consolidated data. Retail clients benefit from improved prices as a result of tighter spreads and greater execution certainty offered by higher trading volumes.
8. Innovation	There has been considerable investment in technology throughout the entire trading cycle, which has improved the efficiency of markets and provided investors with new instruments and order types that may better serve their needs.
9. Clear regulatory framework	Regulators should set the full regulatory framework at the outset of the introduction of competition to maximise market integrity and to reduce the impact for industry of system changes.

[40] Investment Technology Group (ITG) Review, *Canadian market microstructure review second quarter 2010: Have some new HFT strategies come to town?*, ITG, 20 July 2010, www.itg.com/news_events/papers/ITG-Canada-Market-Microstructure-Q2-2010.pdf. We note that it is unclear how much of this reduction was due to competition rather than other market developments.

[41] SEC, *Statement of George U Sauter*, Managing Director and Chief Investment Officer, The Vanguard Group, Inc., SEC Market Structure Roundtable, 2 June 2010, www.sec.gov/comments/4-602/4602-5.pdf.

Competing exchange markets in Australia

79 It is difficult to decouple market developments that are occurring irrespective of the introduction of competing exchange markets and the impact of introducing competition. The regulatory approach we adopt will significantly influence the impact that competition has on the Australian market. We have an opportunity to establish a robust framework and regulatory approach to competitive markets in Australia. However, this will require stakeholders to focus on the medium-term public benefits of ensuring confidence in the integrity of the price formation process and robustness of our markets. If we successfully translate the lessons from overseas markets, we should be able to maximise the benefits of competition and minimise the costs of fragmentation.

80 Australia is well positioned for the introduction of competition—we are able to learn from experience in other jurisdictions and build on an already strong foundation.

Expected benefits from competition

81 We expect that Australia should be able to achieve benefits similar to those experienced overseas and outlined in Table 4, items 6–8. In particular, we expect the benefits from competition under the proposed regulatory framework may include innovation, maintained or improved market quality (including market depth, liquidity and price formation) and more choice in execution venues, as well as lower costs (i.e. tighter spreads and lower transaction costs) for investors. To retail investors, this can translate into lower brokerage fees if market participants pass on the reductions in market fees as execution venues compete for volume.[42]

82 The proposed regulatory framework seeks to balance the efficiencies and dynamism that can be expected to flow from competition with our priorities to build confidence in the integrity of our capital markets, protect investors and facilitate international capital flows. In particular, the proposed regulatory framework seeks to add to market depth and liquidity (and so limit or reduce indirect market impact costs) on pre-trade transparent markets on a sustained basis, enhance market price formation and increase capital raising capacity.

83 Competition between exchange markets may also impact other markets (e.g. derivative markets with equity referenced futures, options and contracts for difference). Competition is likely to result in greater depth in equity markets, which should reduce short-term volatility across related products and

[42] There is already a reasonable level of competition among retail brokers in Australia; therefore, it is reasonable to expect that cost savings will be at least partially passed on to clients.

facilitate hedging by derivative market makers. This could reduce the costs of trading in derivative products. See REP 215, paragraphs 297–305.

84 It is reasonable to project the gross benefits to the economy will surpass the additional resources, technology and information costs to be incurred by the industry. See REP 215, paragraphs 276–289, for a discussion of the costs.

85 We discuss the impact of competition on investors in REP 215, paragraphs 292–296.

Expected regulatory issues from competition

86 There are various regulatory issues involved in introducing competition. Competition will, in some cases, increase the regulatory issues already outlined as a result of broader market developments, including providing greater impetus for a best execution rule.

Fragmentation

87 While there is already fragmentation of liquidity in Australia—between ASX's execution venues and market participant crossing systems—pre-trade and post-trade information is centralised through reporting to ASX. Competing exchange markets will mean that this market information will fragment between markets, which could harm price formation if the information is not brought together in a single consolidated view in an efficient and cost effective way. In addition, fragmentation may also result in erosion of liquidity in pre-trade transparent markets and enhance surveillance challenges. We outline a number of options for achieving a consolidated view of pricing in Section K.

88 Where there are multiple exchange markets, we also need to ensure market operators cooperate to put in place consistent market controls to reduce and mitigate the risk of volatile or unusual market events. Standardisation of trading halts across execution venues will also reduce the potential for the types of problems that arose in the US on 6 May. See Section E and Section L for our responses to 6 May and proposals for market operator cooperation.

89 More discussion of the likely benefits and costs of competition are set out in REP 215, paragraphs 276–309. We are interested in receiving feedback on what the industry perceives to be the likely benefits and costs of competition in Australia.

Cost recovery for ASIC's supervision function

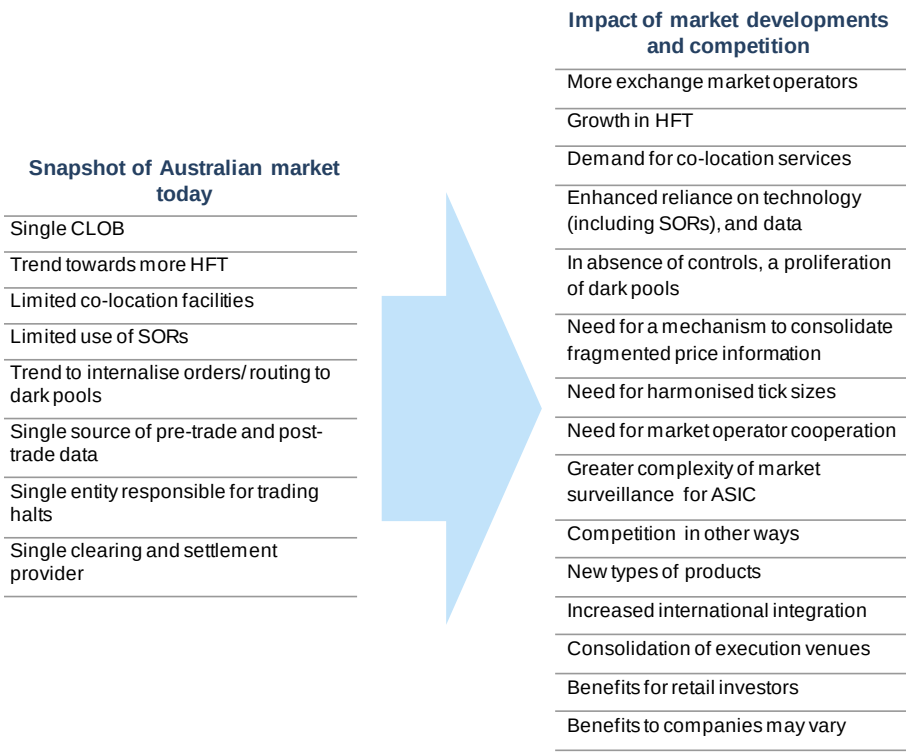
90 The fees regulations enabling recovery of ASIC's costs from the industry for our new real-time market supervision function do not contemplate multiple

market operators offering equity market products.[43] The Government will need to amend the regulations before the commencement of competition in order to levy competing market operators (who in turn may pass on some levy contribution to market participants). The Government will consult separately on the costs that need to be recovered and the basis for their recovery, including from whom and over what time period.

Likely impact of market developments and competing exchange markets in Australia

91 Given our proposed regulatory approach, our current best view of the changes likely to occur in Australia as a result of market developments and competing exchange markets is illustrated in Figure 3.

Figure 3: Snapshot of Australian market today and the impact of market developments and competing exchange markets



92 The expected impacts of market developments and the introduction of competition in Australia are described in more detail in Table 5. We are interested in your feedback on whether these impacts are likely to occur in Australia and if there are other impacts that we have not listed here.

[43] Corporations (Fees) Regulations 2001.

Table 5: Likely changes resulting from market developments and competing exchange markets

Change	Description of change
More exchange markets	In addition to Chi-X, there are likely to be one or two other markets offering pre-trade transparent execution venues. We expect competition between these execution venues will lead to reductions in trading fees and innovation in the way in which fees are charged (e.g. maker–taker pricing, fee discount periods and, volume rebates). There is also likely to be innovation in the types of orders (e.g. hidden orders) and trading mechanisms.
Growth in HFT and other high-speed trading	Multiple low-latency, pre-trade transparent execution venues will create trading opportunities for new types of traders, particularly HFTs. In overseas markets, a large portion of this trading is by electronic liquidity providers. This is also likely to occur in Australia. HFT will likely result in further reductions in average order sizes in pre-trade transparent venues; many more orders per trade; increased trading volume; tightening of spreads, although potentially with lower depth at the best prices; and greater deployment of intermarket arbitrage strategies. This is likely to place increased pressure on institutional buy-side firms to use algorithms in pre-trade transparent markets and seek block liquidity in dark pools. In the absence of a US-style 'trade-through' rule,[44] growth in HFT volume is likely to be lower than has been observed in US markets. Growth of HFT in Australia is also likely to be constrained by the ban on naked short selling.
Demand for co-location services	An increased focus on speed will lead to increased demand for co-location services. Execution venues may build or outsource the operation of data centres. Adequate transparency and disclosure of pricing and access rules for these data centres will aid in ensuring fair access concerns are addressed.
Enhanced reliance on technology and data	Market participants will face new challenges in developing technology that allows them to connect to multiple markets. This will lead to new demand for, and supply of, technology services, including smart order routers, trading algorithms, middle and back office order management, execution quality analytical tools and risk controls (e.g. for market operators and for market participants offering direct electronic access to clients). Technology will increasingly become a barrier to entry, although it is expected that low-cost solutions will be offered to smaller participants. The accuracy and speed of access to pre-trade and post-trade data will become increasingly important, as will the impact of increasing volumes on system capacity.
More dark pools/ internalisation	The dark pool execution venues currently operating in Australia are also likely to face competition from new entrants. Indeed, we are already seeing movement in this space. This will include additional market participant crossing systems. However, given our proposed size restrictions on dark trading (see Table 7), we anticipate the number of dark venues will not proliferate to the same extent they have in the US and Europe, and will perform more of their traditional role of facilitating execution of large market impact orders.

[44] A trade-through rule protects displayed bids and offers from being bypassed.

Change	Description of change
Need for a mechanism to consolidate fragmented pre-trade and post-trade information	Fragmentation of market data will be minimised through the provision of consolidated prices. A consolidation mechanism will help ensure fair and efficient price formation. It also ensures small investors have access to information at a reasonable cost. However, institutions and proprietary traders will likely invest in low-latency data feeds provided directly from exchange markets. Without a clear mechanism for delivering consolidated prices, it is likely that Australian investors will experience the same problems as those observed in Europe, including high data costs and high search costs.
Need for harmonised tick sizes[45]	Standardisation of tick size rules across execution venues will prevent market operators from competing on tick sizes, reducing the possibility for market participants to step ahead of limit orders by an economically insignificant amount.
Need for market operator cooperation	Cooperation is essential for fair, orderly and transparent markets. Standardisation of trading halts across execution venues will also reduce the potential for the types of problems that arose in the US on 6 May.
Greater complexity of market surveillance/ supervision	There will be greater challenges for ASIC in market surveillance. Surveillance across multiple execution venues will increase the complexity of monitoring the market. Data management needs will increase (due to both increased volumes and complexity). Functionality will be required to monitor HFT strategies and dark pool trading. Market participant compliance operations will experience a similar increase in the complexity of their business.
Competition in other ways	There is the potential for competition in other ways—for example, competition in clearing services, listings, data services and cross-border trading.
New types of products	Lower transaction costs, increased market depth and lower latencies facilitate the creation of new products. For example, there is a trend towards index products, including exchange-traded funds.
Increased international integration	Lower transaction costs, increased market depth and lower latencies facilitate international capital flows, more closely linking the Australian equity market with international venues.
Consolidation of execution venues	Whether or not the ASX and SGX merger is approved and proceeds, consolidation of some current and future execution venues (including cross-border) can be expected to occur in the future. Such consolidation is a global trend.
Benefits for retail investors	Retail clients will obtain improved prices as a result of tighter spreads, greater execution certainty offered by higher trading volumes and product innovations.
Benefits to companies may vary	It is possible that the net benefits to companies may differ by their size. It is anticipated that competition will initially be limited to ASX 200 companies. Therefore, initially, there will be little or no impact on trading for companies outside this group. However, liquidity may increase, especially for larger companies, which may facilitate capital raising. As was the case in Canada, it is possible more liquidity will shift to smaller companies over time. However, if there is a tendency towards greater price volatility, it may be harder to raise additional capital.

[45] A tick size is the minimum amount by which share prices are allowed to vary.

Objectives of the proposals in this paper

93 Building on our high-level priorities in paragraph 24—to build confidence in the integrity of Australia's capital markets, protect retail investors and facilitate international capital flows—there are a number of specific objectives that have guided our thinking in responding to the regulatory issues presented by general market developments and competing market operators: see Table 6. We consider that the achievement of these objectives will improve the performance of the financial system, including improving the efficiency of the capital formation process in Australia and the overall efficiency and development of the Australian investment landscape.

ASIC's proposed regulatory approach

94 There are competing interests in the market structure debate and both ASIC and the Government need to ultimately make decisions about the regulatory approach on a public interest basis.

95 In preparing our proposals we have looked closely at the regimes and experience overseas. We have liaised with Australian industry, as well as with regulators and industry in the US, Canada, the United Kingdom (UK), France, Germany, Hong Kong and Singapore. We intend to continue this dialogue.

96 Given the evolution of our market and the increasingly significant role that technology is playing in competition between ASX products, we propose a number of changes that may be necessary whether or not a competing market operator enters the market. We had intended to address these issues as part of a longer term review of the market integrity rules that were made when supervision was transferred to ASIC in August 2010. The introduction of competition for exchange market services will provide greater impetus for these changes and we propose to consider these issues simultaneously (albeit some may be transitioned in over a longer period of time).

Table 6: Objectives of the proposed regulatory framework

Objective	Description
Market quality	Our objective is to promote general market quality and efficient price formation, and to minimise any negative impacts of order fragmentation to multiple execution venues, through: • ensuring the availability of consolidated pre-trade and post-trade data; • mechanisms to promote deep pre-trade transparent markets; and • controls to limit unnecessary volatility and promote market stability.
Market integrity	Our objective is to deliver market integrity through: • common minimum risk controls and conduct standards for market participants and market operators; • cooperation arrangements between ASIC, market operators and other stakeholders to promote fair, orderly and transparent markets; • consolidated and tailored pre-trade and post-trade data for the market and ASIC; and • efficient ASIC surveillance systems and sufficient capacity to anticipate changes in market structure—supported by a fair and reasonable cost recovery regime.
Investor protection	Our objective is to promote investor protection through: • a clear best execution requirement; • post-trade reporting and information to assess the quality of order execution; • other market integrity rules; and • education of retail investors on the implications of changes in markets.
Fairness	Our objective is to promote fair markets through: • clear requirements for fair and equal access to services, including consolidated information about orders and trades; • functional regulation that applies similar obligations to similar activities; • common and non-discriminatory rules that apply to all market operators; and • market operators taking steps, on an ongoing basis, to ensure that their exchange markets are fair, orderly and transparent.
Efficient implementation	Our objective is to ensure efficient implementation of the final rule changes, including: • recognising that the principles underlying the existing framework in Australia have worked well and build on the strengths of the existing framework and avoid any unwarranted change; • taking account of international best practice, including the core principles of the International Organization of Securities Commissions (IOSCO);[46] • learning the lessons from overseas experience (e.g. some of the issues now emerging from analysis of the 6 May 2010 'flash crash') by taking a measured approach to the transition to competition; and • having a regulatory framework that is as simple and robust as possible, with clear responsibilities imposed on market operators and market participants.

[46] IOSCO Report, *IOSCO objectives and principles of securities regulation* (IOSCOPD323), IOSCO, 10 June 2010.

97 The core elements of our proposed regulatory approach are designed in large part to:

(a) protect the price formation process; and

(b) apply equivalent treatment to 'like' activity.

The core elements are interlinked and should therefore be considered as a package rather than in isolation. It will be important for there to be a mechanism to ensure orders are routed to the venue with the best outcome, for market efficiency and investor protection reasons. It is equally important that there are sufficient and complementary incentives in place for investors to display limit orders, as limit orders drive the price formation process on market, which is important for capital allocation decisions and capital raising. We considered two 'packages', as illustrated in Figure 4.

98 The summary of our proposals in Table 7 shows:

(a) the full suite of regulatory proposals in this consultation paper. It should be clear which proposals are designed to protect the price formation process and apply equivalent treatment to 'like' activity;

(b) the objective/s relevant to each proposal; and

(c) our expectations about timing—the proposals that must be implemented before competition can commence and those that are not tied to competition.

99 Draft market integrity rules reflecting these proposals are set out in a separate document, *Australian equity market structure: Draft market integrity rules.*

Figure 4: The two regulatory 'packages' we considered to promote price formation

	Package 1: Proposed—Principles-based	Package 2: Alternative—Trade-through
Market efficiency	Best execution obligation (best total consideration) Professional investors may nominate objectives other than total consideration Routing obligation on the participant No mandated linkages at the market operator level Reporting on execution quality and order routing to hold participants/venues accountable	Trade-through rule—mandated linkages, market-level routing based on best price (top-of-book or full depth-of-book) Factors other than price not relevant Possible participant routing of unfilled portion Reporting on execution quality and order routing to hold participants/venues accountable
Best result for clients	Best execution—best outcome for client	Best execution—best outcome for client
Incentives to display limit orders	Orders below a certain size (no market impact) on pre-trade transparent market. Applies to participants and markets	Trade-through rule—pre-trade transparent orders are protected (either top-of-book or full depth-of-book)
Pre-trade transparency	All orders below a certain size must be on pre-trade transparent market Otherwise, price improvement or block trades at any price to manage market impact	Execution venues must be fully pre-trade transparent when they have sufficient volume
Post-trade transparency	Immediate publication of trades	Immediate publication of trades
Consolidated information	Full consolidation of market data	Full consolidation of market data
Arguments for each package	Builds on existing structure in Australia—factors other than price are relevant Promulgates innovation Pre-trade transparency exceptions manage market impact Requires fewer mandated linkages than trade-through Onus on participant to deliver best result Limits 'natural liquidity' shift to dark pools	Embeds virtual price–time priority, protecting limit orders Simple for market participants to maintain single connection Price is simple to measure for execution quality and is a fair measure Flexibility for smaller/newer venues to operate to a lower regulatory standard/cost
Arguments against each package	Pre-trade transparent orders may be traded through More challenging to evidence execution on factors other than price Limits the size to which large orders may be sliced before becoming pre-trade transparent	Requires complex linkages between market operators Forces price to be more important than other factors Risk of information leakage and market impact for large orders Best price execution will be systematised and may be 'gamed' May encourage more fragmentation when pre-trade threshold reached

Summary of regulatory proposals

100 This section summarises the regulatory proposals set out in this consultation paper and related matters.

Table 7: Summary of regulatory proposals

Issue	Proposal	Objective	Required for competition
Scope of products	The proposals relate to shares, managed investment schemes and CDIs admitted to quotation on ASX. We are seeking feedback on whether some of the proposals should be extended to other products, such as futures, other equity-related products and debt products.	Fairness	Yes
Persons in scope	The proposals relate to market operators and market participants. We are seeking feedback on whether the proposals should be extended to indirect market participants, fund managers and approved data consolidators.	Fairness	Yes
Proposals in response to recent and likely market developments			
Extreme price movements (in part a response to the 'flash crash')	A market operator must have: • pre-trade price and volume controls to prevent the entry of anomalous orders; • the capability to immediately and automatically suspend trading in a specific product and/or market-wide if the price in a specific product and/or index shifts by a prescribed threshold in a certain time period; and • transparent and predictable arrangements for cancelling clearly erroneous[47] trades, which must be harmonised through a protocol between market operators and ASIC.[48]	Market quality and integrity	No (but as soon as possible; market operators will need to have cooperation arrangements in place from day one)
Direct electronic access (DEA) (i.e. access to markets via the connection of a market participant)	A market participant must ensure DEA[49] clients meet certain standards, including having adequate financial resources and procedures. A market participant and its DEA clients should have a contract in place governing the market access arrangements. A market participant must have:	Market quality and integrity	No (possibility to implement in stages)

[47] A clearly erroneous trade is a trade that deviates so substantially from current market prices that it is deemed to be erroneous.
[48] ASX Public Consultation, *Trade cancellation policy*, ASX Limited, 6 October 2010, www.asx.com.au/about/pdf/20101006_trade_cancellation_policy.pdf.
[49] The proposals do not apply to online retail market participants.

Issue	Proposal	Objective	Required for competition
(in part a response to the 'flash crash')	• adequate systems and controls (e.g. pre-trade); and • capacity to immediately disable DEA clients' access. Note: ASIC already has the power to direct a market operator to suspend a market participant.		
Algorithmic trading (in part a response to the 'flash crash')	A market participant must ensure that all systems used to generate orders by it and its DEA clients are appropriately tested, monitored continuously during use, and able to be immediately disabled.	Market quality and integrity	No (implement soon after)
Best execution	A market participant must take reasonable steps to obtain the best total consideration for its clients. 'Total consideration' for non-professional clients will mean 'price' for a transitional period. However, professional clients and clients transacting in sizes of $500,000 or more may nominate other factors. A market participant that deals with clients: • must have policies and procedures in place for complying with the best execution obligation; • should identify execution venues where orders on behalf of clients may be executed. We do not expect that all market participants must have direct connections to all execution venues; • should review the arrangements at least annually; • should disclose to clients that it has a best execution obligation and the execution venues on which client orders may be executed; • should ensure incentives for order flow and bundling arrangements do not alter its best execution obligation; • must be able to demonstrate to its clients and to ASIC that it has executed client orders in accordance with their execution arrangements; and • should publish a periodic report about order routing decisions (we propose a similar report to SEC Rule 606 in the US). An execution venue should publish a report about the prices, speed and volume of its executions (we propose a similar report to SEC Rule 605 in the US). We are seeking feedback on whether there is benefit in market operators offering order routing and, for a transitional period, whether we should explicitly enable market participants to meet their best execution obligation solely on ASX.	Market quality, investor protection and fairness	Yes (for obligation) No (for best execution reporting—possibility to implement in stages)

Issue	Proposal	Objective	Required for competition
Pre-trade transparency	A market participant must display orders on a pre-trade transparent market subject to the following exceptions: • *blocks*—for the most liquid products, the order would result in a trade of $1 million or more and for other products it would be $500,000 or more; we are seeking feedback on whether there should also be a $2.5 million threshold for products with the highest liquidity and a $200,000 threshold for those with the lowest liquidity; • *portfolios*—the existing ASX thresholds for portfolio trades; • *price improvement*—where the price is determined to be within the spread of the best bid and offer across markets in a size equal to or greater than $20,000; • *undisclosed orders*—where the order is a dark order on a pre-trade transparent market and the size is equal to or greater than $20,000; and • where trades are done outside the normal trading hours of all markets. A market operator must make pre-trade information available immediately on a continuous basis. Market operators and market participants operating dark pools must periodically report to ASIC on the nature and activity of trading on the pool. This will enable ASIC to monitor developments.	Market quality and fairness	Yes
Market integrity measures (in part a response to the 'flash crash')	A market participant must: • notify suspicious activity to ASIC; and • distinguish on orders and trade reports short sales to ASIC. We are considering whether a market participant should also include on orders and trade reports for the benefit of market operators and ASIC only (i.e. it would not be publicly available): • the origin of the order, including if on behalf of a client the categorisation of the client; and • for orders and trades originating from a market participant's algorithm, a unique identifier for the algorithm. We are considering whether large traders should identify themselves to ASIC and transmit their unique identifier on all orders. A market participant must identify on trade reports the execution venue for transactions not done on an order book.	Market integrity	No (expect to implement in stages; expect changes with the least systems impact to be implemented at or soon after competition)

Issue	Proposal	Objective	Required for competition
Proposals in response to competing exchange markets in Australia			
Post-trade transparency	A market participant must immediately report all trades to a market operator. The party that should report is the executing or selling party. A market operator must publish the information immediately. We propose to permit delayed publication in accordance with existing ASX procedure 3500—where the trade meets the $2 million, $5 million, $10 million and $15 million thresholds.	Market quality and integrity	Yes
Consolidation of pre-trade and post-trade information	We intend to bring about an outcome of consolidated information being available to market users. We are considering a number of options: see Section K.	Market quality and integrity	Yes
Market operator: cooperation	A market operator must comply with a multimarket protocol (the protocol will govern arrangements relating to trading halts and suspensions, and sharing of information).	Market quality and integrity	Yes
Synchronised clocks	A market operator must synchronise its clocks to a clock nominated by ASIC.	Market quality and integrity	Yes
Identifiers	A market operator must use common market participant identifiers and stock symbols.	Market quality and integrity	Yes
Tick size	A market operator must implement common tick sizes (we propose to retain the existing ASX tick sizes).	Market quality and integrity	Yes
Trading to be on licensed market	Market participants must not transact by means other than under the rules of a market operator, subject to certain exceptions.	Market quality and integrity	Yes
Trading during a trading halt	A market participant must not trade on a CLOB or off-order book during a market-integrity-related trading halt or suspension.	Market quality	Yes
Trade confirmations	If a single client order is executed in multiple fills and across multiple markets, a market participant may aggregate transactions into a single confirmation.	Market quality and efficient implementation	Yes

101 While these regulatory proposals apply to market participants and market operators, they are likely to also impact persons that access markets indirectly through a market participant, investors and listed companies: see Table 8.

Table 8: Persons impacted by the regulatory proposals

Proposal	Investors	Listed companies	Indirect participants	Market participants	Market operators
Proposals in response to recent and likely market developments					
Extreme price movements: see Section E	✓	✓	✓	✓	✓
Direct electronic access: see Section F	✓		✓	✓	✓
Algorithmic trading: see Section F	✓		✓	✓	✓
Best execution: see Section G	✓		✓	✓	✓
Pre-trade transparency: see Section H	✓	✓	✓	✓	✓
Market integrity measures: see Section I	✓	✓	✓	✓	✓
Proposals in response to competing exchange markets in Australia					
Post-trade transparency: see Section J	✓	✓	✓	✓	✓
Consolidation of information: see Section K	✓	✓	✓	✓	✓
Market operator cooperation: see Section L					✓
Synchronised clocks: see Section L				✓	✓
Identifiers: see Section L				✓	✓
Tick size: see Section L	✓	✓	✓	✓	✓
Market participant: off-book trading: see Section M				✓	✓
Trade confirmations: see Section M	✓		✓	✓	

Mechanisms for implementing the proposals

102 We intend to implement our proposals through market integrity rules,[50] unless otherwise stated. This is a new rule-making power that ASIC received as a result of its new supervisory function under the *Corporations Amendment (Financial Market Supervision) Act 2010*. Draft market integrity rules reflecting the proposals in this paper are set out in a separate document, *Australian equity market structure: Draft market integrity rules*.

103 Market integrity rules are legislative instruments. ASIC will need to complete a Regulatory Impact Statement before finalising any rules. We will also require Ministerial consent before making any rules and any rules are subject to Parliamentary disallowance.[51]

104 The proposed market integrity rules would supplement existing ASIC Market Integrity Rules (ASX Market) 2010, which came into effect on 1 August 2010, and will supplement any new market integrity rules that are created for Chi-X.

> Note: Additional market integrity rules that may apply to Chi-X (e.g. to address participant conduct and harmonise arrangements such as trading during a takeover and settlement timeframes) are not in this consultation paper. Proposed market integrity rules for new markets will be the subject of separate targeted consultation with relevant stakeholders.

105 Regulations are required to enable the recovery of ASIC's costs of market supervision from the industry to cater for multiple market operators and market developments. Regulations would also be required if the Government chose to change the scope of ASIC's jurisdiction to make market integrity rules to persons other than market operators and market participants.

Implementation and transitional arrangements

106 We expect that certain proposals in this paper will take time and investment to implement and that certain proposals are not essential to enable competition for exchange market services to commence. We expect that certain proposals may be implemented soon after competition commences and others may need to be implemented in stages over a longer period of time. We seek your feedback on whether transitional requirements are necessary and what those arrangements should be.

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[50] Some of the issues would require regulations to be made to broaden the scope of ASIC's power to make market integrity rules.

[51] A House of Parliament may disallow a market integrity rule within 15 sitting days after it is tabled in the House if a motion to disallow has been given and within the 15 days: a resolution to disallow is passed, the motion is not withdrawn or the motion is not acted upon.

107 For example, we expect that transitional arrangements may be necessary for proposals relating to extreme price movements, electronic trading, evidencing best execution and client identification. We are considering specific transitional arrangements for connectivity required for best execution designed to reduce the burden of implementation for market participants and enable competition to commence sooner than if all market participants were required to comply from day one.

108 The questions in this paper are framed to seek your feedback on costs, benefits and implementation challenges. We expect that the proposals will require investment in technology, staff and compliance processes to varying degrees. This investment will contribute to the performance of the Australian market and our competitiveness internationally. Some likely impacts are outlined in Table 9 (note this is not an exhaustive list). We are particularly interested in feedback on these areas and your view on the timeframes required to implement the proposals.

109 Some clients of market participants will also be impacted. They may need to:

(a) be educated about the implications of the proposals for them;

(b) enter into new DEA agreements;

(c) receive market participant disclosures about best execution;

(d) interpret consolidated market data; and

(e) consent to receiving aggregated trade confirmations.

110 The feedback in response to issues raised in this consultation paper and in REP 215 will provide the basis for more developed consideration of market developments. The feedback may also lead to further measures on issues for which we do have proposals.

111 A lesson we have taken from jurisdictions that have introduced competition for exchange market services is that there are efficiency gains of a central body facilitating industry dialogue about technical implementation issues, including market-wide testing. We are interested in feedback about the role ASIC should play in facilitating implementation of the proposals in this paper.

Table 9: Likely impacts of the proposals on market operators and market participants

Area	Possible impacts—market operators	Possible impacts—market participants
Technology (see REP 215, paragraph 309 and Figure 9, for a gap analysis and more on technology impacts)	Market operators will need systems to: • control order entry into matching engines; • automatically halt trading; • capture and on route additional data for execution quality reporting and for ASIC surveillance; • incorporate changes to pre-trade transparency arrangements; and • synchronise clocks in trading and reporting systems to a Universal Time Clock.	Market participants will need systems (either their own or those of third parties) that: • filter client orders and can disable DEA client access and algorithms; • can process market data, determine to which execution venue to route orders based on predefined parameters and then route the orders; and • capture and on route additional data for execution quality reports (if operating an execution venue), for order routing reports, for trade publication and for ASIC surveillance.
Human resources	Market operators will need staff to: • consider the implications of the proposals, including the impact on technology; • cooperate with ASIC and other market operators; • provide investor education about the consequential changes to their market; and • provide training to other staff.	Market participants will need staff to: • consider the implications of the proposals, including the impact on technology; • assess if DEA client agreements are sufficient; • monitor compliance with best execution arrangements and review the arrangements; • make best execution disclosures to clients; and • provide training to other staff.
Compliance policies and procedures	Market operators will need to: • review existing policies and procedures and amend where necessary; • put in place new policies and procedures for trading halts and trade cancellations; and • have procedures for ensuring clocks remain synchronised.	Market participants will need to: • review existing policies and procedures and amend where necessary; and • put in place new best execution policies and procedures.

Parties involved in the process

112 There are a number of parties involved in giving effect to these proposals:

(a) The Government ultimately decides whether and when to introduce competition for trading services, including approval of any new market licences, and the approval of ASIC's market integrity rules. ASIC's market integrity rules are also subject to disallowance by Parliament.

(b) Treasury advises the Government, including if any regulations (such as fee regulation changes) are necessary.

(c) ASIC advises the Government and Treasury on market licence applications and other financial market issues and makes market integrity rules with Ministerial consent.

(d) The Australian Competition and Consumer Commission (ACCC) has jurisdiction over competition-related issues.

(e) Market operators must amend their operating rules and written procedures to reflect the new regulatory framework. Cooperation between market operators and ASIC relating to implementation, operation of markets and surveillance is imperative.

(f) Market participants, investors, and data and system vendors need to respond to the new regulatory framework.

Education

113 As a separate matter we intend to engage industry about the best mechanism to educate the wider marketplace on the issues raised in this paper. Education for retail investors may be required about the changing market landscape, proposed new investor protections (e.g. best execution), what the changes mean and where to get advice. It may be communicated, for example, through:

(a) our consumer website (FIDO);

(b) articles in relevant financial and industry association magazines; and

(c) specific ASIC publications.

PART 2: RESPONSE TO RECENT AND LIKELY MARKET DEVELOPMENTS

Part 2 outlines:

- *the regulatory setting*—a description of the existing regulatory framework for market operators and market participants (see Section C); and
- *the scope of our proposals*—details of the scope of our proposals, including the products to which our proposals apply and the persons to whom our proposals apply (see Section D).

Part 2 also outlines the regulatory proposals that we consider are necessary whether or not a competing market operator enters the market. The introduction of competition for exchange market services will provide greater impetus for these changes. Part 2 addresses the following issues:

- *extreme price movements*—such as that experienced on 6 May 2010 in the US (see Section E);
- *electronic trading requirements*—it is important that there are appropriate systems and controls in place to mitigate against disorderly trading conditions (see Section F);
- *best execution*—market participants already have choice in where and how to execute client orders and these decisions should be based on the best interests of clients (see Section G);
- *pre-trade transparency and price formation*—to protect the price formation process on-market and reward investors for posting limit orders (see Section H); and
- *market integrity measures and regulatory reporting*—to monitor new trading developments and help to maintain the integrity of the Australian market (see Section I).

C Regulatory setting

Key points

The Corporations Act requires that a person must only operate, or hold out that they operate, a financial market if they have a market licence.

Market participants are subject to Australian financial services (AFS) licence obligations, ASIC market integrity rules and the operating rules of the relevant market.

Different market integrity rules currently apply to different markets. ASIC intends to harmonise the rules as part of a separate exercise from the issues raised in this paper.

Existing regulatory framework for market operators

114 A 'financial market' is broadly defined in s767A of the Corporations Act. It encompasses facilities through which offers to acquire or dispose of financial products are regularly made or accepted.

115 We have given some guidance for assessing whether a person is operating a financial market in Australia in Regulatory Guide 172 *Australian market licences: Australian operators* (RG 172). RG 172 also explains our general approach to market regulation and describes the objectives of market regulation, which are to:

(a) protect market participants; and

(b) enhance market integrity and financial system stability.

116 In considering the wider market structure issues in this paper, we have expanded on these objectives: see Table 6.

117 Section 791A of the Corporations Act requires that a person must only operate, or hold out that they operate, a financial market in this jurisdiction if:

(a) the person has a market licence that authorises the person to operate the market in this jurisdiction; or

(b) the market is exempt from the operation of Pt 7.2 of the Corporations Act.

118 Market operators are subject to the obligations in Pt 7.2 of the Corporations Act, including s792A(a) which requires market operators, to the extent it is reasonably practicable to do so, to do all things necessary to ensure that the market they operate is a fair, orderly and transparent market. The proposals in this paper in no way alter this obligation on market operators.

119 In addition to the obligations in Pt 7.2, market operators of certain domestic markets are subject to the ASIC market integrity rules which came into operation on 1 August 2010.[52] While the market surveillance function has been transferred to ASIC, market operators must still ensure operational systems, processes and operating rules continue to support a fair, orderly and transparent market.

120 We will need to amend RG 172 to reflect changes stemming from the transfer of supervision on 1 August 2010 and the proposals in this paper.[53] We propose to do this after the rules discussed in this consultation paper are settled. We expect to also publish additional regulatory guidance on the aspects of this consultation paper not relating to market operators.

121 Markets also have their own operating rules that govern the way in which the market functions to ensure it operates in a fair, orderly and transparent manner. Any proposed changes to a market's operating rules are reviewed by ASIC and may be disallowed by the responsible Minister.

Crossing systems

122 Off-order book crossing systems (e.g. Liquidnet, ITG POSIT, UBS's PIN and others) currently operate under the ASX operating rules—that is, the trades are regulated under the rules of ASX. They are reported to ASX immediately and published to the wider market.

123 In response to the Johnson Report's[54] recommendation to increase competition for exchange market services, the Government agreed to consider 'enhancements to the market licensing regime to ensure that Australia maintains a world-class regulatory system that facilitates market efficiency and innovation and accommodates new developments'. Accordingly, the Government is considering whether any changes would be desirable to ensure the regulatory regime is both sufficiently robust and flexible to support sustainable competition. The proposals in this paper reflect the existing regulatory framework for financial markets.

Fees for supervision

124 The Corporations (Fees) Regulations 2001 provide details of the fees payable by market operators for ASIC undertaking real-time market surveillance. The regulations include dates, amounts and other points of reference by which fees will be levied. They will need to be amended to take

[52] Market participants of ASX, ASX 24, NSX, SIM VSE, APX and IMB are subject to market integrity rules. The rules are on the Federal Register of Legislative Instruments at www.frli.gov.au.
[53] RG 172 will need to reflect ASIC's new market surveillance function under Pt 7.2A of the Corporations Act and the resulting change to the functionality of a market operator's obligations under s792A(a).
[54] Australian Financial Centre Forum, *Australia as a financial centre: Building on our strengths* (Johnson Report), November 2009, www.treasury.gov.au/afcf/content/final_report.asp.

account of multiple markets and market developments. The Government will consult on this issue separately.

Existing regulatory framework for market participants

125 Section 911A of the Corporations Act requires persons who carry on a financial services business in Australia (e.g. a broking business) to hold an Australian financial services licence (AFS licence) covering the provision of the financial services, or to be exempt from the requirement to hold such a licence. The obligations that an AFS licensee must comply with are set out in Div 3 of Pt 7.6.

126 In addition to the obligations in Div 3 of Pt 7.6, market participants are subject to:

(a) the operating rules of the market/s of which they are a participant; and

(b) for participants of certain markets, the ASIC market integrity rules related to that market, which came into operation on 1 August 2010.[55]

Market integrity rule harmonisation

127 In Consultation Paper 131 *Proposed ASIC Market Integrity Rules: ASX and SFE markets* (CP 131), we stated our intention to conduct a harmonisation exercise so that only one set of ASIC market integrity rules applies to all like markets. While we had intended to address many of the issues that we are raising in this consultation paper as part of the harmonisation exercise, the introduction of competition for exchange market services will provide greater impetus for these changes and we propose to consider these issues simultaneously (albeit some may be transitioned in over a longer period of time).

[55] The market integrity rules currently apply to market operators and market participants. Regulations would be required to extend the jurisdiction of the market integrity rules to additional classes of persons.

D Scope of the proposals

Key points

The products to which the proposals in this paper apply are shares, managed investment schemes and CHESS Depository Interests (CDIs) admitted to quotation on ASX. We are seeking feedback on whether certain proposals should be extended to other products, such as futures, other equity products and debt products.

The persons to whom the proposals in this paper relate are exchange markets, market participants (including those providing crossing services to their clients) and, potentially, data consolidators. We are seeking feedback on whether the proposals should be extended to other parties (e.g. indirect market participants, fund managers).

We intend to set maximum penalties which can be imposed for contravention of each of the proposed market integrity rules. We are seeking feedback on the appropriate maximum penalty for contravention of each of the proposed market integrity rules.

Products to which the proposals apply

Proposal

D1 We propose a market integrity rule that would apply the proposals in this paper to shares, managed investment schemes and CDIs admitted to quotation on ASX. These are referred to in the remainder of this paper as 'equity market products'.

The proposals do not apply to trading in companies that are dual-listed where the trading occurs in the instrument listed in the overseas jurisdiction and is subject to regulation in that jurisdiction.

The short sale tagging proposal (Section I) applies to a broader range of products.

Draft market integrity rules, Chapter A, 'Definitions'

Your feedback

D1Q1 Do you agree that the proposals should apply to equity market products as defined?

D1Q2 Which of the proposals in this paper should naturally apply to other products, such as futures, other equity-related products and debt products?

Explanation and rationale

128 We consider that many of the proposals in this paper (e.g. controls for extreme price movements, direct electronic access and best execution) should eventually apply to a broader set of products. However, we intend to limit the scope of products initially to address the immediate issues relating to equity market products. This is consistent with the Government's announcement about competition on 31 March 2010.

129 Other products to which we are considering extending some of the proposals include:

(a) other ASX-quoted securities (e.g. bonds and AQUA products);

(b) equity-related securities quoted on other Australian domestic markets (i.e. Asia Pacific Exchange and National Stock Exchange of Australia);

(c) listed futures contracts; and

(d) derivatives over equity market products and other financial products referred to in (a) and (b), irrespective of where they are traded. This would include those quoted on ASX 24 as well as over-the-counter (OTC) derivatives.

130 If and when we determine that such a proposal (to extend the scope of the products) has merit, we will consult separately.

131 It is not our intention for the proposed market integrity rules to apply to trading that occurs on an overseas market where a company is listed on both an Australian and overseas market (e.g. BHP Billiton has listings on ASX and the London Stock Exchange). Trading in dual-listed companies in the jurisdiction where the company is dual-listed is subject to local regulation.

132 The regulatory issues that the proposals in this paper address are most prominent in trading of equity market products, and at this stage the first potential competing market operator is only considering quoting some equity market products. We will keep the other products under review.

Persons to whom the proposals apply

Proposal

D2 We propose a market integrity rule that would apply the proposals in this paper to one or more of:

(a) market operators that offer trading services in equity market products;

(b) market participants that deal in equity market products on their own behalf or for clients, whether or not the participant transacts on a CLOB or off-order book in equity market products; and

(c) market participants who provide a service to clients that enables the electronic matching of orders in equity market products with orders of the participant or of other clients of the participant.

We are considering whether to extend the scope to other financial services providers (e.g. indirect market participants, fund managers).[56]

Depending on what option is taken to ensure sufficient consolidation of market data (see Section K), rules may apply to market operators about the provision of market data to ASIC-approved data consolidators.

Draft market integrity rules, Chapter A, 'Definitions'

Your feedback

D2Q1 Will there be material gaps in the regulatory approach if the proposed rules apply only to market operators and market participants? Should the proposals apply to other persons (e.g. indirect market participants and fund managers)?

D2Q2 Should the scope be extended so minimum standards for data consolidation apply to data consolidators under market integrity rules rather than indirectly?

Explanation and rationale

133 Within each proposal we have clearly identified the persons to whom the proposal relates.

134 It may be appropriate that some of the proposals apply to indirect market participants (i.e. AFS licensees that use a direct market participant to access a market). This would ensure:

(a) equivalent treatment for parties undertaking similar activities;

(b) fair treatment of clients; and

(c) consistent and efficient trading in equity market products.

For example, it may be appropriate for the best execution obligation in Section G and the pre-trade transparency obligation in Section H to apply to indirect market participants. These types of provisions apply to all broker–dealers in the US, Canada and Europe.

135 We are also considering whether certain proposals (such as best execution) should apply to fund managers. It is also the case in many overseas jurisdictions that best execution applies to fund managers.

136 A new Corporations Regulation would be required to enable any market integrity rule to apply to such parties.

137 If and when the proposals extend to apply to other products as discussed in paragraphs131–132, the scope of persons that the rules apply to may also be

[56] The market integrity rules currently apply to market operators and market participants only.

extended. For example, if products listed on markets other than ASX come into scope, certain of the proposed rules may also apply to market operators that offer trading services in those products.

Proposed approach to breaches of the market integrity rules

138 We would like your feedback on the appropriate maximum penalty for each market integrity rule we are proposing to make. The maximum penalty amount must not exceed $1 million.

139 We are proposing that each market integrity rule that includes a penalty amount be categorised as Tier 1, Tier 2 or Tier 3. This is consistent with the existing penalty ranges under the ASIC Market Integrity Rules (ASX Market) 2010. The proposed maximum penalty amounts for each tier are set out in Table 10.

Table 10: Proposed penalty amounts for market integrity rules

	Penalty amount set for the rule	Maximum pecuniary penalty that the court may order a person to pay	Maximum penalty that a person may pay under an infringement notice
Tier 1	$20,000	$20,000	$12,000
Tier 2	$100,000	$100,000	$60,000
Tier 3	$1,000,000	$1,000,000	$600,000

Proposal

D3 We propose to set a maximum penalty for contravention of each market integrity rule, depending on the nature of the rule.

Your feedback

D3Q1 What are your views on an appropriate maximum penalty for each of the proposed market integrity rules in this paper?

E Extreme price movements

Key points

The 6 May 'flash crash' in the US has highlighted the need for greater controls around extreme price movements. We propose that market operators:

- have in place order entry controls that prevent anomalous orders from being entered;
- have controls in place to automatically limit certain priced orders from executing during extreme market movements; and
- provide certainty and transparency around trade cancellations.

US regulators' response to the 'flash crash' in the US

140 The 6 May 'flash crash' in the US has resulted in greater global regulatory and market focus on risk controls and the need for clearer anomalous trading resolution arrangements. Discussion of the events of the 'flash crash' is in REP 215, paragraphs 91–117.

141 Despite the price of many individual securities falling dramatically, the 10% market-wide circuit breaker that was in place across US equity markets and some of the derivative markets was not triggered. This threshold is currently under review by the US Securities and Exchange Commission (SEC). More than 20,700 trades in US securities were subsequently cancelled. Many investors suffered losses and have lost confidence in the market.

142 The SEC undertook two immediate policy responses to the 'flash crash'. The first was to introduce new single stock circuit breaker (SSCB) rules, on a pilot basis. The exchange markets and the Financial Industry Regulatory Authority (FINRA)[57] are required to pause trading across the US in any Russell 1000 stock and a list of exchange-traded funds for 5 minutes when a 10% change in price is experienced in a 5-minute interval.[58] The rationale for the SSCBs is to give the markets the opportunity to attract new trading interest or liquidity in a stock, establish a reasonable market price, and resume trading in a fair and orderly fashion. SEC Chairman Schapiro stated that SSCBs were an essential first step, but can be improved. The SSCBs have already been triggered when a pause in trading was not warranted (e.g. errors in the printing of trades done over-the-counter).

[57] FINRA is the largest independent regulator for all securities firms doing business in the US.
[58] See SEC Press Release, *SEC approves new stock-by-stock circuit breaker rules* (Release No. 2010-98), SEC, 10 June 2010, www.sec.gov/news/press/2010/2010-98.htm, and SEC Press Release, *SEC approves rules expanding stock-by-stock circuit breakers and clarifying process for breaking erroneous trades* (Release No. 2010-167), SEC, 10 September 2010, www.sec.gov/news/press/2010/2010-167.htm.

143 The SEC's second policy response was to work with the market operators on harmonising rules for cancelling anomalous (termed 'clearly erroneous' in the US) trades and to increase the transparency of the process.

144 The SEC's next steps are likely to include a careful review of a limit-up/limit-down procedure that would prevent order execution outside specified parameters, while allowing trading to continue within those parameters.[59] Such a procedure could prevent anomalous trades from occurring, as well as limiting the disruptive effect of those that do occur. In September 2010, NYSE Euronext, Nasdaq OMX Group Inc and Bats Global Markets proposed new rules to mandate that market makers' bids and offers be within 8% of the national best bid or offer.[60]

Experience in Australia

145 In Australia, volatile market situations and erroneous trades have been handled by ASX Group on a case-by-case basis. ASX has powers to take actions it considers necessary to ensure that its markets are fair, orderly and transparent, including suspending or halting trading and cancelling or amending a transaction.[61] It has issued guidance on how it will use its powers in relation to trade errors, error disputes and cancellations.[62] ASX and ASX 24 do not impose any automated circuit breaker or price limits on their markets. In October 2010, ASX Group issued a consultation paper on proposed changes to the trade cancellation policies for ASX and ASX 24.[63]

146 ASIC undertook some informal soundings with the industry after 6 May, including with parties in the US and Canada. In Australia we specifically questioned whether existing controls are adequate to deal with events such as the 'flash crash'. We found:

(a) strong support for order entry controls at the market operator level to screen anomalous orders;

(b) general support for automated measures to address extreme price movements, such as volatility interruptions or trading collars;[64] and

(c) market participants want certainty and transparency around trade cancellations.

147 Our proposed measures are intended to enhance the level of confidence in the Australian market and encourage investor participation. The objective is

[59] Joint Report, *Findings regarding the market events of May 6, 2010*, US Commodity Futures Trading Commission and SEC, 30 September 2010, p. 7, www.sec.gov/news/studies/2010/marketevents-report.pdf.
[60] 'Flash crash leads call to curb quotes', *Australian Financial Review*, 20 September 2010, p. 51.
[61] See ASX Operating Rule 3100.
[62] ASX Guidance Note, *Trade errors, error disputes, and cancellations* (Guidance Note 14), ASX Limited, 31 March 2008.
[63] ASX Public Consultation, *Trade cancellation policy*, ASX Limited, 6 October 2010, www.asx.com.au/about/pdf/20101006_trade_cancellation_policy.pdf.
[64] Typically, trading collars are set price limits at which a 'limit down' is triggered, whereby the securities can only trade at or above that level for a period of time. Collars can limit the disruptive effect of anomalous trades.

to minimise the risk of such events occurring and to manage and mitigate the liquidity and volatility effects of any unusual market events that might occur in the future in Australia.

148 In a multimarket environment, we propose that market operators would be required to apply these measures in compliance with a multimarket protocol between ASIC and all market operators so as not to produce an inconsistent outcome that is contrary to the objective of market integrity: see Section L.

149 In today's market, trading can have more widespread and immediate effects due to complex trading strategies and technologies, resulting in greater interdependence between markets. For example, equity trades are regularly linked to derivatives trades, with orders in one market dependent on the outcome of trades in another. We are considering whether the controls introduced into the equity market should have corresponding controls in the derivatives market given the interconnection of the two.

Order entry controls for anomalous orders

Proposal

E1 We propose market integrity rules that will require a market operator to:

(a) have in place minimum order entry price controls and maximum order entry price and volume controls to prevent anomalous orders from entering the market;

(b) make the thresholds of these controls available to the public;

(c) in setting the relevant thresholds, have regard to (at least) current price, historical price movements and tick sizes; and

(d) have in place documented procedures for setting, regularly reviewing and monitoring the effectiveness of these controls.

Draft Market Integrity Rules EA to E1-4

Your feedback

E1Q1 What implications will this measure have on market integrity? Will it reduce the number of trade cancellations?

E1Q2 What implications will this measure have on liquidity?

E1Q3 What implications will this measure have on confidence in the market?

E1Q4 Who should decide the thresholds? What factors should be taken into account when deciding the thresholds?

E1Q5 Should the thresholds be made available to the public?

E1Q6 What implications will this measure have on market-participant-level order entry controls?

E1Q7 What practical alternatives are there to ensure anomalous orders are not entered into the market?

E1Q8 Should this obligation apply to all financial products traded on exchange markets and to operators of non-equity market product markets (e.g. derivative markets)?

E1Q9 Will compliance with this proposed obligation require any changes to your systems or procedures? What are the likely costs of such changes (where possible, please identify the nature of likely costs, quantify the estimated costs and indicate whether such costs will be one-off or ongoing)? Are there likely to be any significant impediments to making these changes?

E1Q10 Do you have views on whether this proposal is likely to impose any other additional costs or burdens on any class of stakeholder? Where possible, please identify the nature of the likely costs/burdens, quantify the estimated costs (including any assumptions and relevant data) and indicate whether such costs/burdens will be one-off or ongoing.

Explanation and rationale

150 Anomalous trades are undesirable primarily because they interrupt the price formation process for the products involved. This disruption may then trigger a sequence of market-moving trades, mis-pricing other products. While trades in these mis-priced products may be subsequently cancelled, it can be problematic and undesirable to unwind all related trades.

151 Order entry controls can filter out orders with anomalous prices, such as offers at prices well below the market. Order entry volume controls can filter out anomalously sized orders. These controls can together minimise the execution of anomalous orders and ensure that the effects of such trades are curtailed.

152 Preliminary feedback from industry in Australia and overseas suggests that many participant-level pre-trade controls are basic—there is room for improvement. Further, due to competition for speed and the latency implications, filters may not necessarily be utilised at all times.

153 Order entry controls at the market-operator level ensure a level playing field between market participants (in terms of speed) and minimal entry into the market of anomalous orders that may subvert the price formation process.

Volatility controls for extreme market movements

154 A volatility control can be defined as a post-order control that prevents a certain order from being matched. Volatility controls operate as a ‘safety net’ beyond order entry controls and can operate at an individual stock level or market-wide.

155 Order entry controls will not screen out every order that may have a disorderly effect on the market. Regulators around the world have been

actively discussing the use of automated volatility controls to promote confident and informed investor participation, including the implementation of volatility interruptions followed by volatility auctions and/or collars.

Proposal

E2 We propose market integrity rules that will require a market operator to:

(a) suspend trading in an individual equity market product and/or market-wide trading if the price of the relevant equity market product and/or market-wide index reaches a threshold prescribed by ASIC. During a suspension, orders should be permitted to be added and withdrawn from the order book; and

(b) implement appropriate automatic suspension and reopening procedures.

In setting the prescribed threshold, ASIC would at a minimum have regard to the following features of the equity market product and/or market:

(a) standard deviation of the product price;

(b) volatility;

(c) daily price range;

(d) historical price range; and

(e) the operation of the volatility control mechanism in a wider market context (including impacts on interconnected markets).

It is our intention that this obligation should ultimately apply to all financial products traded on exchange markets. We will assess scope and timing in the context of the comments we receive. We intend to undertake follow-up consultation with industry before setting the prescribed threshold.

Draft Market Integrity Rules E2-1 to E2-2

Your feedback

E2Q1 Do you consider that volatility controls (in single equity market products and market-wide) are necessary or desirable in the Australian market environment? Why?

E2Q2 Do volatility controls help stabilise markets or do they destabilise markets?

E2Q3 Should there be a market-wide volatility control (with or without volatility controls for individual equity market products)?

E2Q4 What are your views on this proposal? Please comment on what you consider to be appropriate for the duration of the volatility control, the mechanism for implementing it, the reopening procedure, and whether there should be different requirements for different products.

E2Q5 How should a volatility control take into account explained volatility (e.g. caused by a material earnings downgrade)? Should it be possible to manually override an automated volatility control?

E2Q6 Should volatility controls between equities and derivatives products be consistent? If so, how should this operate?

E2Q7 Should there be specific controls on particular types of orders (e.g. market orders)? What would be the advantages and disadvantages of these?

E2Q8 How regularly should volatility controls be reviewed to ensure they are relevant to the prevailing market environment?

E2Q9 What other practical alternatives are there for stabilising the market?

E2Q10 What are your views on the SSCB pilot rule and thresholds in the US currently in operation (see paragraph 142)?

E2Q11 Should this obligation apply to operators of non-equity market product markets (e.g. derivative markets)?

E2Q12 What are your views on how the prescribed threshold should be calculated?

E2Q13 What are your views on this methodology for calculating the prescribed threshold? What other metrics should be taken into account?

E2Q14 Should there be different thresholds at different stages of the trading day?

E2Q15 Should volatility controls take account of data relating to trades done off-order book or should they take into account CLOB orders and trades alone? Is there a risk that erroneous reporting of over-the-counter trades would trigger a halt?

E2Q16 Will compliance with this proposed obligation require any changes to your systems or procedures? What are the likely costs of such changes (where possible, please identify the nature of likely costs, quantify the estimated costs and indicate whether such costs will be one-off or ongoing)? Are there likely to be any significant impediments to making these changes?

E2Q17 Do you have views on whether this proposal is likely to impose any other additional costs or burdens on any class of stakeholder? Where possible, please identify the nature of the likely costs/burdens, quantify the estimated costs (including any assumptions and relevant data) and indicate whether such costs/burdens will be one-off or ongoing.

Explanation and rationale

156 Automated volatility controls are a quicker, more transparent and fairer response to disorderly markets and anomalous trades than a response which relies on the exercise of human discretion. This also provides a level of comfort to investors that measures are in place to mitigate extreme market movements.

157 On 6 May 2010, the various market operators had in place the following automated mechanisms to halt or slow trading in individual stocks:

(a) BATS and Nasdaq had collars for market orders;

(b) NYSE had its liquidity replenishment points; and

(c) CME had collars as well as its stop logic functionality.

158 These controls are discussed further in REP 215, paragraphs 101–103 and Table 8.

159 The CME's collar operates for 10 minutes and if the futures contract is still trading down after this period, there is a 2-minute halt and then it is free to trade until the next limit down is reached.

160 Go-slow mechanisms like NYSE's liquidity replenishment point trigger manual auctions in place of automated trading when particular securities suffer extreme price declines.

161 Circuit breakers like the SSCB rules in the US halt trading in particular securities for a specified period when the price of the securities varies outside a predetermined range of volatility. This is designed to give markets the opportunity to attract new trading interest or liquidity in a stock, establish a reasonable market price and resume trading in a fair and orderly fashion.

Transparent cancellation policies for clearly erroneous trades

Proposal

E3 We propose a market integrity rule that will require a market operator to have in place policies and arrangements to cancel clearly erroneous trades. Policies about trade cancellations should:

(a) promote predictability and consistency of actions taken under the policy;

(b) promote fairness;

(c) provide a timely process; and

(d) have a process for disclosing cancellation decisions to the market.

Draft Market Integrity Rule E3-1

Your feedback

E3Q1 Are there any risks in mandating transparent cancellation policies? If so, what are they?

E3Q2 What benefits will the market derive from transparent cancellation policies? Consider interconnected, multi-leg trades.

E3Q3 Should trade cancellation policies be consistent across all markets (equity and derivative)? Should ASIC set this policy?

E3Q4 Will compliance with this proposed obligation require any changes to your systems or procedures? What are the likely costs of such changes (where possible, please identify the nature of likely costs, quantify the estimated costs and indicate whether such costs will be one-off or ongoing)? Are there likely to be any significant impediments to making these changes?

E3Q5 Do you have views on whether this proposal is likely to impose any other additional costs or burdens on any class of stakeholder? Where possible, please identify the nature of the likely costs/burdens, quantify the estimated costs (including any assumptions and relevant data) and indicate whether such costs/burdens will be one-off or ongoing.

Explanation and rationale

162 Currently, ASX permits cancellations if agreed by both counterparties or where ASX determines the trade is contrary to the interests of a fair and orderly market. The assessment is done on a case-by-case basis. Nominated 'dispute governors' provide resolution recommendations to ASX. In October 2010, ASX Group issued a consultation paper on proposed changes to the trade cancellation policies for ASX and ASX 24.[65] ASX proposes to introduce fixed price ranges for both ASX and ASX 24 in which cancellation will and will not occur, removing the range within which counterparties previously had the opportunity, but not the obligation, to agree to a cancellation request from a counterparty. If this approach is adopted, the dispute governors' role will no longer be necessary.

163 Our proposals reflect the IOSCO principles on policies for error trades. IOSCO notes that 'error trade [policies], and in particular the process by which trades are cancelled, can affect market integrity and users' confidence in the markets'.[66] Transparency about the circumstances when trades will be cancelled will assist in minimising cancellations because market participants will have certainty about the point at which trades will be cancelled. Certainty will increase investor confidence and participation in the market.

164 In an environment where there are multiple markets offering trading services in the same product, we consider market operators should have consistent arrangements and cooperate in relation to these arrangements. Our proposals relating to cooperation between market operators in equity market products are in Section L.

165 In a multimarket environment these arrangements should be harmonised to maximise certainty for market participants.

[65] ASX Public Consultation, *Trade cancellation policy*, ASX Limited, 6 October 2010, www.asx.com.au/about/pdf/20101006_trade_cancellation_policy.pdf.
[66] IOSCO Report, *Policies on error trades* (IOSCOPD208), Technical Committee of IOSCO, October 2005.

F Electronic trading requirements

Key points

We propose to build on existing ASIC Market Integrity Rules (ASX Market) by requiring minimum requirements for:

- direct electronic access (DEA), including minimum client standards, a legally binding contract with clients and pre-trade controls; and
- algorithmic trading, including for algorithms to be appropriately tested and a mechanism to immediately disable them if necessary.

We ask questions in this section about high-frequency trading (HFT) and its impact on market integrity.

166 Chapter 7 of the Corporations Act prescribes many arrangements and controls to promote confident and informed decision making in the financial markets. This section focuses on augmenting existing trading arrangements to align with the evolving market environment and the proliferation of electronic trading. The proposals formalise and incorporate international expectations and best practice, including the recently published IOSCO principles for direct electronic access to markets.[67]

167 Under ASIC Market Integrity Rules (ASX Market) Rules 2.5.4 and 5.5.1, market participants are ultimately responsible for all orders submitted through the participant's access to a market, including by DEA clients and those generated by algorithms, and for compliance of such orders with all relevant regulatory requirements. Market participants must satisfy themselves that there are adequate controls in place to ensure, among other things, that:

(a) the integrity of the market is maintained;

(b) there is system stability; and

(c) financial risk is managed.

Ultimately, this requirement will apply equally to market participants of all markets in equity market products. The proposals in this section complement the existing rules by requiring market participants to take certain steps.

[67] IOSCO Report, '*Principles for direct electronic access to markets* (IOSCOPD332), Technical Committee of IOSCO, 12 August 2010.

Direct electronic access minimum requirements

168 For the purposes of this paper, DEA refers to access to a market by persons who are not direct participants of a market. This access may be either through the market participant's infrastructure or completely non-intermediated (i.e. unfiltered access). Either way, DEA clients are not directly bound by the operating rules of the market that they are accessing. We do not intend for the DEA proposals in this section to apply to access by retail clients through online broking services. This is because access arrangements differ and because in these circumstances the market participant usually retains residual discretion. We are separately considering whether rules are required for this business.

169 DEA is attractive because it enables clients to transmit their orders directly to a market, giving them greater control over their trading decisions and reducing latency. It also enables prospective market users (and their liquidity) to access the market sooner than it might take for them to receive membership.

170 However, DEA has the potential to allow users to access markets outside of the infrastructure and control of market participants. This challenges market participants' traditional risk management approaches and may make rule compliance and monitoring more difficult. It can also challenge the ability of markets to maintain fair and orderly trading conditions.

171 There are three key risks to market participants:

(a) trading risk, where clients' conduct may not be compliant with the market operating rules and the market participant is responsible for the compliance of that conduct;

(b) credit risk, because the market participant is typically financially responsible for the trades of a client; and

(c) reputational risk, because it is the market participant's name (and identifier) that is attached to each trade.

172 DEA poses risks to markets through the potential misconduct of a client or the aberrant systems of clients that result in disorderly trading conditions. Another challenge surrounds the supervision of DEA clients based in other jurisdictions because it is more difficult to take disciplinary action against these clients for misconduct or for creating a disorderly market. Therefore, we consider it necessary for market participants to undertake appropriate due diligence on DEA clients—including those in other jurisdictions—to ensure that they are of high integrity and that the participant understands the nature of the orders that the DEA client may use.

173 Trading via DEA currently falls within the rules framework governing automated order processing (AOP), as certification is required as a

precondition to offering DEA services.[68] Among other obligations, ASIC Market Integrity Rules (ASX Market) 2010 Rule 5.6 requires that all orders that are submitted through AOP systems to ASX are appropriately filtered, and do not interfere with the integrity of the market. AOP systems must also not be used to assist or facilitate manipulative trading. Historically, ASX Guidance Notes 19, 21 and 22 have outlined ASX's expectations of market participants in relation to AOP.

174 Market participants are responsible for identifying and implementing controls to manage their risks, including maintaining organisational and technical resources to comply with the market integrity rules. With a growing number of market participants offering DEA to their clients,[69] we propose a number of changes that clarify the minimum standards of controls required in this environment. These proposals are in line with IOSCO's principles for DEA and have regard to the SEC's recent consultation paper on market access controls,[70] taking into account the distinguishing features of the Australian market.

Minimum standards for direct electronic access

Proposal

F1 We propose a market integrity rule that will require, as a precondition for DEA, a market participant to ensure its DEA clients meet minimum standards, including that each DEA client:

(a) has adequate financial resources;

(b) has adequate procedures in place to ensure that all relevant persons:

(i) are both familiar with, and comply with, all relevant regulatory requirements; and

(ii) have knowledge of and proficiency in the use of the order entry system used by the DEA client;

(c) has their order entry system tested before being connected to an execution venue to ensure the use of the system does not interfere with market integrity and is monitored on an ongoing basis;

(d) has adequate trading controls, systems and processes to monitor all trading through their DEA; and

(e) is of high integrity.

To comply with this rule, it is expected that a market participant will:

[68] See ASX Operating Rules, Section 1.
[69] About 70% of market participants had AOP certification as at December 2009, compared with 42% in 2006: see ASX Review, *Algorithmic trading and market access arrangements*, ASX Limited, 8 February 2010, www.asx.com.au/about/pdf/20100211_review_algorithmic_trading_and_market_access.pdf.
[70] SEC Proposed Rule, *Risk management controls for brokers or dealers with market access* (Release No. 34-61379), SEC, 19 January 2010.

(a) undertake appropriate due diligence on all DEA clients who may submit orders through the participant's market access—before granting access; and

(b) have an understanding of the nature of orders a DEA client may use.

Draft Market Integrity Rule F1

Your feedback

F1Q1 Are these standards adequate, or should others be included? Please elaborate.

F1Q2 Will compliance with this proposed obligation require any changes to your systems or procedures? What are the likely costs of such changes (where possible, please identify the nature of likely costs, quantify the estimated costs and indicate whether such costs will be one-off or ongoing)? Are there likely to be any significant impediments to making these changes?

F1Q3 Do you have views on whether this proposal is likely to impose any other additional costs or burdens on any class of stakeholder? Where possible, please identify the nature of the likely costs/burdens, quantify the estimated costs (including any assumptions and relevant data) and indicate whether such costs/burdens will be one-off or ongoing.

Legally binding contract for direct electronic access

F2 We propose a market integrity rule that will require a market participant to have a legally binding written contract with the DEA client, the nature and detail of which should be appropriate to the nature of the service provided at all times. The contract should at least require that the DEA client:

(a) meets the minimum standards for a DEA client (as set out in proposal F1); and

(b) ensures that any person to whom the DEA client grants market access meets the same minimum standards required of DEA clients.

Draft Market Integrity Rule F2

Your feedback

F2Q1 To what extent do market participants already have contracts in place with their DEA clients?

F2Q2 Should the market operator or ASIC set minimum terms for these contracts or should this be left to the market participant?

F2Q3 To what extent do DEA clients sub-delegate their access to their own clients?

F2Q4 Are transitional arrangements necessary? Should implementation timeframes differ for disclosure to existing and new clients? What are your views on what the transitional time period and arrangements should be?

F2Q5 Will compliance with this proposed obligation require any changes to your systems or procedures? What are the likely costs of such changes (where possible, please identify the nature of likely costs, quantify the estimated costs and indicate whether such costs will be one-off or ongoing)? Are there likely to be any significant impediments to making these changes?

F2Q6 Do you have views on whether this proposal is likely to impose any other additional costs or burdens on any class of stakeholder? Where possible, please identify the nature of the likely costs/burdens, quantify the estimated costs (including any assumptions and relevant data) and indicate whether such costs/burdens will be one-off or ongoing.

Explanation and rationale

175 ASIC Market Integrity Rules (ASX Market) Rule 5.5.2 contains a broad obligation on a market participant to have resources necessary to ensure that the orders submitted by it (manually or through its systems) do not interfere with the efficiency and integrity of the market. ASIC Market Integrity Rules (ASX Market) Rule 5.5.3 requires a market participant to be able to determine the origin of all orders it submits to the market.

176 The existing framework provides for a market participant to assess the risks in providing DEA services, and to appropriately manage such risks. We have found that much of the market already has in place legally binding contracts and ensures that clients meet minimum standards. We propose to formalise this practice so that the entire market appropriately addresses the risks posed by DEA. Where DEA clients are not market participants and are not subject to the market integrity rules, the proposals aim to ensure that these clients do not bypass the necessary risk controls to protect market integrity.

177 The proposed minimum standards for DEA clients should ensure that clients using DEA understand the rules of the market that they will be trading on, have sufficient systems and processes, are financially capable of funding their trading, are of high integrity and have arrangements to control and monitor trading. The proposal attempts to address the risk posed by clients accessing the market outside of the market participant's traditional risk management infrastructure and controls.

178 Requiring a market participant to have an understanding of the nature of orders a DEA client may use will also assist in complying with origin of order identification: see Section I.

179 Market participants should expect to disclose to ASIC upon request and in a timely manner the identity of their DEA clients, including any person to whom a DEA client sub-delegates market access.

Requirement to have adequate systems and controls

Proposal

F3 Building on ASIC Market Integrity Rules (ASX Market) Rule 5.6, we propose market integrity rules that will require a market participant to:

(a) have in place both operational and financial controls:

(i) to monitor, limit and prevent a client from placing an order that exceeds existing position or credit limits on such a client;

(ii) to ensure all orders submitted through the market participant's access to a market comply with all relevant regulatory requirements and market operating rules;

(iii) to detect and prevent bad algorithms, or erroneous or otherwise disorderly trades;

(iv) that handle orders rejected by the filters; and

(v) that provide for detailed procedures regarding the generation and handling of exception reports;

(b) maintain comprehensive order records and audit trails;

(c) have in place arrangements to allow for trading by a client or the market participant to be suspended or cancelled;

(d) document its order entry systems, controls and procedures for proposal F3(a)–(c), including its AOP systems and the process flow of orders going through these systems, and maintain a system for regularly reviewing the effectiveness of these; and

(e) have adequate operational and technical capabilities to manage its DEA system, including an adequate:

(i) business continuity plan; and

(ii) system of controls around IT infrastructure and persons with access to a gateway or other device connected to an open interface device.

Draft Market Integrity Rules F3-1 to F3-3

Your feedback

F3Q1 Are current market participant controls sufficient in detecting bad algorithms or erroneous or otherwise disorderly trades?

F3Q2 Do market participants currently employ filters on DEA systems that are not systematically overridden? How effective are they?

F3Q3 Should we consider other controls on DEA, such as a 'go slow' or 'reduce volume' controls?

F3Q4 Will compliance with this proposed obligation require any changes to your systems or procedures? What are the likely costs of such changes (where possible, please identify the nature of likely costs, quantify the estimated costs and indicate whether such costs will be one-off or ongoing)? Are there likely to be any significant impediments to making these changes?

F3Q5 Are there any other practical implications associated with complying with this proposal?

F3Q6 Do you have views on whether this proposal is likely to impose any other additional costs or burdens on any class of stakeholder? Where possible, please identify the nature of the likely costs/burdens, quantify the estimated costs (including any assumptions and relevant data) and indicate whether such costs/burdens will be one-off or ongoing.

F3Q7 Are transitional arrangements necessary? What are your views on what the transitional time period and arrangements should be?

F3Q8 Should the DEA proposals apply to trading in non-equity market products (e.g. derivative markets)?

Explanation and rationale

180 Market participant controls should be appropriate for each client. At this stage, we do not intend to prescribe the necessary controls and filters because we recognise the requirements for each market participant are unique to its client base, its product and service offering, and its business model.

181 Market participants must be able to demonstrate knowledge of the process of order flow through their systems, awareness of areas of increased risk, and accordingly the controls implemented to mitigate the identified risks. Many market participants already document their AOP systems in this way and we consider that this should be common practice across the industry.

182 Orders that are rejected because of such controls must be appropriately dealt with and a system should be in place to ensure this. For example, it is undesirable for rejected automated orders to be redirected to a trader where they are subsequently placed into the market without detailed consideration.

183 Market participants must be able to prevent a DEA client from trading at their own discretion, or at the direction of a market operator or ASIC.

184 Further discussion of DEA is in REP 215, paragraphs 151–159.

Algorithmic trading minimum requirements

185 Automated trading is a growing presence in our equities and derivative markets. Market participants now offer clients fully automated algorithmic trading systems capable of working orders according to client instructions. Clients, brokers and other proprietary traders also have their own algorithms trading their own strategies. These systems are believed to add value by:

(a) assisting in managing large order flows, which otherwise would be executed with less attention (potentially causing poor execution prices or a larger market impact);

(b) implementing complicated trading strategies, which may be impractical manually, such as arbitrage baskets, market making or portfolios;

(c) allowing clients to maintain some control of their orders without relying on direct interaction with sales trading staff; and

(d) reacting to changes in the market with greater speed and accuracy than would otherwise be possible without the use of algorithms.

186 Automated and algorithmic trading strategies are constantly being developed and improved, aiming for greater efficiency in terms of speed, market impact and anonymity. In the process, they become more complex, and the effects of their operations on trading behaviour become more difficult to assess.

187 ASIC is interested in ensuring that this quest for efficiency does not undermine market integrity.

188 Among other compliance obligations, market participants must track and analyse order book conduct by algorithms, and must ensure that an algorithm is not:

(a) interfering with the efficiency and integrity of the market;

(b) resulting in a market being disorderly;

(c) creating a false or misleading appearance of active trading and must actively take into account the circumstances of an order, having regard to the matters set out in ASIC Market Integrity Rules (ASX Market) Rule 5.7.2;

(d) breaching the requirements of the market integrity rules relating to automated order processing; and

(e) breaching the requirements of the market integrity rules and other Corporations Act provisions governing broker controls.

189 These compliance obligations are critical to market integrity. We are considering whether more detailed guidance may be required to ensure that market participants are:

(a) conducting adequate pre-trade and post-trade analysis of order book conduct by algorithms; and

(b) adequately understanding and stress-testing algorithms, to ensure that the algorithms do not affect market integrity and that they understand the effects the algorithms may have on a market under different market conditions.

190 For a short description of algorithmic trading and its prevalence in Australia, see Section B. There is a more detailed discussion in REP 215, paragraphs 122–126.

191 We note that there are already a number of market integrity rules relating to AOP in ASIC Market Integrity Rules (ASX Market) Rule 5.6. These rules relate to systems and connectivity but do not necessarily extend to the programs that automatically generate orders (order algorithms). This section proposes a number of rules that build on the AOP market integrity rules and ASX operating rules by concerning specifically the testing, monitoring and disabling of algorithmic programs.

Proposal

Testing

F4 We propose a market integrity rule that will require a market participant to:

(a) ensure that all order algorithms that it or its clients use, either through its systems or its market participation, are appropriately tested before use; and

(b) document the logic of its order algorithms, have test plans for the order algorithms, and have appropriate measures and outputs.

Draft Market Integrity Rule F4

Your feedback

F4Q1 To what extent are order algorithms currently tested before use?

F4Q2 What instances have been observed of faulty order algorithms? Please provide examples.

F4Q3 Will compliance with this proposed obligation require any changes to your systems or procedures? What are the likely costs of such changes (where possible, please identify the nature of likely costs, quantify the estimated costs and indicate whether such costs will be one-off or ongoing)? Are there likely to be any significant impediments to making these changes?

F4Q4 Do you have views on whether this proposal is likely to impose any other additional costs or burdens on any class of stakeholder? Where possible, please identify the nature of the likely costs/burdens, quantify the estimated costs (including any assumptions and relevant data) and indicate whether such costs/burdens will be one-off or ongoing.

F4Q5 Are there any other practical implications associated with complying with this proposal?

F4Q6 Are transitional arrangements necessary? What are your views on what the transitional time period and arrangements should be?

Adequate systems and controls and documentation

F5 We propose market integrity rules that will require a market participant that uses a trading algorithm to generate orders, or permits DEA clients to use such an algorithm, to:

(a) ensure that once deployed, an order algorithm is continually monitored while in use;[71]

(b) ensure the system is regularly reviewed to ensure it is operating according to its design and specifications, and to ensure it complies with the market integrity rules;

(c) have in place adequate systems and controls to:

(i) limit or prevent bad algorithms, or erroneous or otherwise disorderly trades generated by algorithms;

(ii) maintain comprehensive order records and audit trails of orders and trades generated by algorithms;

(iii) handle orders rejected by filters;

(iv) provide for detailed procedures regarding the generation and handling of exception reports; and

(v) allow for the operation of algorithms to be immediately disabled; and

(d) document its arrangements to comply with proposal F5(a)–(c).

Draft Market Integrity Rules F5-1 and F5-2

Your feedback

F5Q1 Do you consider that there is an adequate level of understanding in the market of algorithms used? What do you consider is necessary to ensure that market participants adequately understand their execution algorithms? Should there be additional obligations on market participants (e.g. additional reporting to ASIC)? Please provide details.

F5Q2 How often do market participants review their order algorithms? What degree of post-trade analysis is conducted on algorithmic trading and order book conduct?

F5Q3 Should order algorithms be required to have an inbuilt circuit breaker requiring them to automatically stop if they move too far from specified parameters? If so, what parameters should ASIC consider?

F5Q4 We are seeking comment on any incidences where automated or algorithmic trading has resulted in inappropriate and/or undesirable effects on a market. In particular, what trading strategies do you believe have resulted in these effects? Examples of what may be considered inappropriate or undesirable include:

(a) layering of the order book, which creates a false impression of liquidity;

(b) pinging or sniffing algorithms that have intent other than execution;

(c) cascading or looping algorithms that cause volatility or price support;

[71] This proposed rule is intended to build on the AOP requirements in ASIC Market Integrity Rules (ASX Market) 5.6.1, 5.6.3 and 5.7.

(d) algorithms that flood the market with orders that are intended to be cancelled, in order to distract or confuse rival traders (i.e. 'quote-stuffing'); and

(e) algorithms that purposely use up bandwidth, making it progressively more difficult for slower market participants to get time–price priority.

F5Q5 Are there concerns about the shortcomings of IT infrastructure or IT security leading to the intentional misuse of order algorithms or other sensitive information? If so, would an obligation on the market participant to have in place adequate IT security measures be appropriate?

F5Q6 How effective are pre-trade and post-trade filters (at the market-participant level) in preventing order book and trading misconduct by algorithms?

F5Q7 Should ASIC Market Integrity Rules (ASX Market) Rule 5.7.2 on circumstances of orders be clarified or amended to extend beyond the immediate impact of an order to take account of recent trades beyond the immediately preceding trade?

F5Q8 Should the algorithmic trading proposals apply to trading in non-equity market products (e.g. derivative markets)?

F5Q9 Will compliance with this proposed obligation require any changes to your systems or procedures? What are the likely costs of such changes (where possible, please identify the nature of likely costs, quantify the estimated costs and indicate whether such costs will be one-off or ongoing)? Are there likely to be any significant impediments to making these changes?

F5Q10 Do you have views on whether this proposal is likely to impose any other additional costs or burdens on any class of stakeholder? Where possible, please identify the nature of the likely costs/burdens, quantify the estimated costs (including any assumptions and relevant data) and indicate whether such costs/burdens will be one-off or ongoing.

F5Q11 Are there any other practical implications associated with complying with this proposal?

F5Q12 Are transitional arrangements necessary? What are your views on what the transitional time period and arrangements should be?

Explanation and rationale

192 These rules are designed to protect the integrity of the Australian market by minimising the number of aberrant algorithms in Australia and ensuring that they can be shut down immediately if required.

193 Aberrant algorithms can have a significant impact on market integrity and orderliness. For example, in November 2007 a proprietary trader at Credit Suisse manually changed its system parameters, which resulted in an electronic loop that generated hundreds of thousands of unintended messages, clogging NYSE's order processing system and severely delaying

messaging traffic. Credit Suisse was fined $150,000 for poorly supervising the development and execution of a trading algorithm.[72]

194 In today's interconnected and fast moving market environment, algorithms can very quickly generate trading errors and have market impact. Therefore, we are proposing that there must be appropriate testing of all systems that electronically generate orders before their use. Such algorithmic systems should be developed in such a way as to:

(a) comply with the Corporations Act, market integrity rules and market operating rules; and

(b) have regard to their market impact, including the potential flow-on effects whereby orders entered by an algorithm trigger other algorithms to submit orders and result in cascading prices away from fair value. This is often exacerbated by the triggering of stop-loss order types, which perpetuates the movement. This domino effect was experienced on 6 May 2010 in the US and saw some shares fall to as low as US$0.01 (see Section E).

In order to fulfil this obligation, we expect market participants to have in place test plans and test scripts for each new system, or alteration to a system, and that market participants impose a similar obligation on clients that are accessing their infrastructure.

195 The adequate systems and controls requirements for algorithmic trading are similar to those proposed for DEA. We consider that these are equally necessary for algorithmic trading because of the areas of increased risk posed by algorithmic trading. Market participants must be able to demonstrate knowledge of the process of order flow through their systems, awareness of areas of increased risk, and accordingly the controls implemented to mitigate the identified risks. This includes a capability to immediately disable the operation of an algorithm at the market participant's own discretion, or at the direction of a market operator or ASIC.

196 These are issues being considered by regulators around the world. For example, the US SEC raised the issue in its January 2010 Concept Release on equity market structure[73] and the Committee of European Securities Regulators (CESR) raised the issue in its call for evidence on micro-structural issues.[74] The impact of HFT on market integrity is also on the agenda of IOSCO. There is a more detailed discussion in REP 215, paragraphs 127–172.

[72] NYSE Disciplinary Decision, *NYSE Hearing Board decision: 09-NYSE-24*, NYSE LLC, 27 November 2009.
[73] SEC Concept Release, *Equity market structure* (Release No. 34-613358), SEC, 13 January 2010.
[74] CESR Call for Evidence, *Micro-structural issues of the European equity markets* (CESR/10-142), CESR, 1 April 2010.

High-frequency trading: Your feedback

197 We have described HFT and noted its recent proliferation in Section B and there is a more detailed discussion in REP 215, paragraphs 127–172. While we do not encourage or discourage the use of HFT, we recognise that its prevalence has a fundamental impact on the operation of exchange markets. We are therefore seeking feedback on the prevalence of HFT in Australia and the impact it has or may have on the wider market.

198 We emphasise that we have no tolerance for any form of market misconduct, including market manipulation, irrespective of whether it originates from HFTs or other market participants.

Issue

F6 We are interested in your feedback on the impact of HFT and other high-speed trading activity on equity market functioning and market integrity. We are particularly interested in your views on the effectiveness of the market manipulation provisions in the ASIC Market Integrity Rules (ASX Market) and the Corporations Act in light of new automated trading strategies.

Your feedback

F6Q1 What HFT strategies are prevalent in Australia? In your view, do they affect the operation of the market or pose risks to market integrity?

F6Q2 Do you consider that the above conduct is inappropriate or undesirable? What other examples of conduct should we be focusing on?

F6Q3 Should there be a minimum order size to discourage traders from placing orders that are of an economically insignificant amount? What should the order size be?

F6Q4 The SEC has identified that 90% or more of the orders that HFTs submit to markets are cancelled,[75] citing this as an area of concern. The SEC and other regulators are assessing whether this practice is fraudulent or improper. What reasons may certain market participants have for high cancellation rates? Do you consider that these reasons are legitimate? Do you consider high rates of order cancellation are a concern? What controls, if any, are necessary to address this? For example, should there be a minimum order to trade ratio?

F6Q5 Should ASIC consider setting controls to manage the volume of messaging traffic (e.g. fee for order cancellations, limits on the speed of messaging or a minimum period of time that orders must stand before they can be cancelled)?

F6Q6 What impact does HFT have on price formation and the depth and quality of trading interest in the order book?

[75] ML Schapiro, *Strengthening our equity market structure*, Address by SEC Chairman, Economic Club of New York, New York, 7 September 2010, www.sec.gov/news/speech/2010/spch090710mls.htm.

F6Q7 Should there be formal obligations on electronic liquidity providers to help maintain orderly trading conditions (e.g. to provide two-sided quotes and to limit their ability to be aggressive liquidity takers during extreme trading conditions)?

F6Q8 Should electronic liquidity providers be exempt from the naked short selling ban?[76] If so, why? What criteria should be used for determining whether or not a particular provider or class of providers should be awarded an exemption (see REP 215, paragraph 170)?

F6Q9 What impact does maker–taker pricing have on the integrity of markets? Should maker–taker rebates be capped (see REP 215, paragraphs 163–167)?

[76] Section 1020B of the Corporations Act prohibits naked short selling.

G Best execution

Key points

We propose a best execution obligation that requires market participants to take reasonable steps to obtain the best total consideration for their clients. Professional clients and clients dealing in large sizes may nominate other factors. Best price will satisfy this requirement while there is no material difference in execution costs between execution venues.

We are considering whether to explicitly permit trading to remain on a single market for an interim period and for best execution to apply only to that market.

We are proposing to require a market participant to:

- have effective arrangements for complying with the best execution rules;
- disclose certain information about its execution arrangements to clients;
- regularly review and monitor the effectiveness of its execution arrangements; and
- demonstrate compliance with its execution arrangements, including by publishing reports on order routing practices.

Market operators should publish reports on execution quality.

Why is a best execution rule necessary?

199 Best execution obligations promote efficiencies by ensuring orders are directed to the venue offering the best result. It is also an important investor protection mechanism because it ensures that market participants do not place their own interests ahead of those of their clients (e.g. by exploiting information asymmetries between themselves and their clients) and that clients receive the best result.

200 Individual clients do not typically make the decision about where to send their orders for execution. This decision is usually delegated to the market participant, who has choice in where and how to execute trades. For example, an order can be executed:

(a) on a CLOB;

(b) by routing the order to an intermediary;

(c) by internalising the order; and

(d) off-order book in some other way (e.g. through a crossing system).

201 A market participant's incentives for routing an order to a particular venue may differ from its client, which may result in the market participant sending the order to a venue that does not offer the best result for the client.

202 Market participants are already subject to obligations to avoid conflicts between their interests and those of their clients. AFS licensees must do all things necessary to ensure that the financial services covered by their AFS licence are provided efficiently, honestly and fairly, and have in place adequate arrangements for the management of conflicts of interest: s912A of the Corporations Act. Additionally, execution on ASX is for the most part based on price–time priority and market participants of ASX are obliged to act fairly and in due turn when dealing with client orders and to allocate transactions fairly.[77]

203 However, we believe it is important that there is a clear, objective rule about achieving the best result for clients. This is consistent with the approach in many jurisdictions (e.g. the US, Canada and Europe), as well as IOSCO's principle that intermediaries should have arrangements with the 'aim of protecting the interests of clients'.[78]

204 Best execution obligations are relevant even in a single market environment. However, they become more important when there are multiple execution venues because market participants have more choice in where and how they execute client orders. As discussed in REP 215, paragraphs 173–178, there is increasingly more choice available to market participants in Australia and we expect this choice to increase with the emergence of more broker crossing systems, more service offerings from ASX and the possibility of competitive exchange markets. When there are multiple execution venues, there can be more difficulties in determining what constitutes best execution, and order handing procedures take on greater significance.[79] Therefore, we consider it necessary to implement a best execution rule now.

Overseas models

205 Best execution provisions overseas tend to require all broker–dealers (not just market participants) and fund managers to take reasonable steps to execute client orders on terms most favourable to the client. However, there are significant differences in their implementation. In the US (and soon Canada),[80] the best execution rule is overlaid with a 'trade-through' obligation, which results in a 'best price' result. In Europe, the Markets in Financial Instruments Directive (MiFID) enables investment firms to take account of factors other than just price.

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[77] ASIC Market Integrity Rules (ASX Market) Rules 5.1.3 and 5.1.5.
[78] IOSCO Report, *IOSCO objectives and principles of securities regulation* (IOSCOPD323), IOSCO, 10 June 2010, p. 11.
[79] IOSCO Report, *Report on transparency and market fragmentation* (IOSCOPD124), Technical Committee of IOSCO, November 2001.
[80] Trade-through is due to be implemented in Canada in February 2011: see The Order Protection Rule, National Instrument 23-101, *Trading Rules* (2010) 33 OSCB 787, 22 January 2010, www.osc.gov.on.ca/documents/en/Securities-Category2/rule_20100122_21-101_amd-21-101and23-101.pdf.

'Trade-through' model

206 A 'trade-through' rule protects pre-trade transparent orders from being bypassed. It requires operators of execution venues to route orders to the market with the best displayed bid or offer. In practical terms, it embeds price–time priority across multiple pre-trade transparent execution venues, as 'broker–dealers' must execute against the best price or offer price improvement.[81] This is the same basis on which trades are executed on ASX's CLOB today, subject to the exceptions for crossings. Price–time priority plays an important role in the fair, orderly and transparent operation of markets by:

(a) encouraging the display of limit orders, which should increase liquidity and contribute to price formation. Trades at prices that are inferior to displayed limit orders may discourage investors from displaying orders if they believe it is likely that such orders will be bypassed; and

(b) ensuring the fair execution of orders.

207 By their nature, such rules require that marketable orders will receive at least the best price displayed on any market.[82] In terms of best execution, a 'trade-through' rule means that when a market participant chooses to route a client order to an execution venue, it must do so on the basis of best price.

208 In the US, trade-through protection applies to the single best bid and offer (i.e. top-of-book protection), although the SEC is consulting on whether to increase the protection to all displayed orders.[83] All bids and offers will be protected in Canada.[84] In both the US and Canada, 'broker–dealers' are permitted to price improve on the best displayed price.

209 To give effect to this rule, market centres[85] in the US are required to be connected to one another. Market centres route orders to the market centre displaying the best price at the time the order is received. Placing the obligation on market centres rather than market participants reduces the number of linkages required. However, broker–dealers may also choose to have smart order routers (SORs).

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[81] We note that in the US where markets are able to trade at the best price on another market, time priority is not always achieved on a cross-market basis. The SEC is consulting on prohibiting 'trading at' the same price as the best bid or offer to embed both price and time priority: see SEC Concept Release, *Equity market structure* (Release No. 34-612258), SEC, 13 January 2010, p. 27.
[82] SEC Concept Release, *Equity market structure* (Release No. 34-612258), SEC, 13 January 2010, p. 27.
[83] Regulation NMS Rule 611 and SEC Concept Release, *Equity market structure* (Release No. 34-612258), SEC, 13 January 2010.
[84] The Order Protection Rule, National Instrument 23-101, *Trading Rules* (2010) 33 OSCB 787, 22 January 2010, www.osc.gov.on.ca/documents/en/Securities-Category2/rule_20100122_21-101_amd-21-101and23-101.pdf.
[85] A market centre is any exchange market maker, OTC market maker, alternative trading system, national securities exchange or national securities association.

Principles-based best execution obligation

210 A principles-based obligation permits market participants to take into account a range of factors (e.g. speed and likelihood of execution) and not just price when executing client orders. This is the approach adopted under MiFID in Europe.[86] For retail clients, the European Commission has clarified that the 'total consideration' received or paid by a client is the most important factor.[87]

211 This type of model places the obligation on market participants to ensure they are connected to appropriate venues, whereas the trade-through rule places the obligation on markets to connect. In Europe, this has been achieved by SORs, which is the mechanism by which 'investment firms' connect to execution venues and route orders to the venue that best achieves predetermined parameters (e.g. price or market impact). Market participants are not required in Europe to connect to all execution venues and there has been some commentary about MiFID not delivering best price for investors.[88]

212 We are proposing a model with some similarities to that in Europe, with a reporting mechanism similar to that in the US to ensure accountability. We propose placing the obligation on the market participant to find the best result in terms of total consideration either paid or payable to the client, rather than requiring market operators to be connected to and route orders to the market with the best price. We expect that market participants will have the capability to route orders. REP 215, paragraph 62, explains what SORs are and what they achieve. REP 215, paragraphs 179–191, elaborates on the best execution arrangements in overseas jurisdictions.

Best execution obligation

Proposal

G1 We propose market integrity rules that will require a market participant when dealing with client orders in equity market products to:

(a) take reasonable steps when handling and executing the client order to obtain the best total consideration for the client. The obligation applies to any dealings for clients, including executions as a result of quotes. We will interpret this obligation for non-professional clients as 'best price' while there are not material

[86] European Commission Directive 2004/39/EC, *Markets in financial instruments directive*, Article 21, http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2006:241:0026:0026:EN:PDF.
[87] European Commission Directive 2006/73/EC, *Implementing MiFID*, Article 44, http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2006:241:0026:0026:EN:PDF. Total consideration is price and the costs related to execution, including venue fees, clearing and settlement fees, and any other fees paid to third parties.
[88] For example, European Commission conference, *MiFID: One year on*, Brussels, 13 November 2008, http://ec.europa.eu/internal_market/securities/docs/isd/conference-summary_en.pdf.

differences in execution costs. For these purposes total consideration means the price paid or received and the execution costs incurred by the client, including market fees and clearing and settlement fees; and

(b) not structure or charge its commissions in such a way as to discriminate between execution venues.

If a professional client or a client with an order of $500,000 or greater provides a specific instruction about the execution of their order, the market participant should take reasonable steps to obtain that outcome.

For the purposes of this obligation:

(c) the term 'professional client' should be interpreted as 'professional investor' in s9 of the Corporations Act; and

(d) clients other than professionals should be interpreted as all other clients.

Options to limit connections for market participants

In addition to the best execution obligation described above, we are seeking your feedback on the following additional possibilities:

(a) *Market operator routing*—an additional obligation on market operators to be connected to one another and to offer an order routing service based on best displayed price to those market participants that want to use it. This would not be a trade-through rule, but rather the provision of an order routing service to be used at the discretion of market participants.

(b) *Best execution on ASX*—for those parties that would prefer more time to prepare to connect to multiple markets, we could consider explicitly limiting the best execution obligation to the ASX market for a transitional period (e.g. 12 months) to reduce the burden of connections to multiple markets.

Draft Market Integrity Rules G1-1 to G1-3

Your feedback

G1Q1 What are the practical challenges for market participants to comply with the proposed best execution obligation?

G1Q2 Do you have any views on whether we should overlay the best execution obligation with a trade-through protection rule similar to that in the US and Canada?

G1Q3 Is it appropriate to allow market participants to meet the best execution obligation based on 'price' rather than 'total consideration' for a transitional period?

G1Q4 Do you have any views on the distinction we have made between professional and non-professional investors? Is professional and non-professional investor an appropriate divide?

G1Q5 Is it appropriate to have a threshold above which transactions for all clients could take account of a range of factors, and is $500,000 an appropriate threshold?

G1Q6 With regard to Option A (i.e. market operator routing):

(a) Would market level routing be of benefit to market participants? What benefits would it provide?

(b) What are the challenges and costs in implementing such a solution? Where possible, please identify the nature of likely costs, quantify the estimated costs and indicate whether such costs will be one-off or ongoing.

(c) Should market operator routers be able to take account of undisclosed orders posted on that market when making routing decisions or only pre-trade transparent orders?

G1Q7 With regard to Option B (i.e. best execution on ASX), should we consider explicitly limiting the best execution obligation so that entities that choose to be a participant of a single market can do so for a transitional period without immediate pressure to connect to new markets?

G1Q8 To what extent do incentives currently determine choice of market participant in which to direct orders? How is this expected to change in the future?

G1Q9 Should the best execution proposals apply to trading in non-equity market products (e.g. derivative markets)?

G1Q10 Will compliance with this proposed obligation require any changes to your systems or procedures? What are the likely costs of such changes (where possible, please identify the nature of likely costs, quantify the estimated costs and indicate whether such costs will be one-off or ongoing)? Are there likely to be any significant impediments to making these changes?

G1Q11 Do you have views on whether this proposal is likely to impose any other additional costs or burdens on any class of stakeholder? Where possible, please identify the nature of the likely costs/burdens, quantify the estimated costs (including any assumptions and relevant data) and indicate whether such costs/burdens will be one-off or ongoing.

Explanation and rationale

Why not a trade-through?

213 A trade-through rule has many advantages. We are particularly drawn to its potential to reinforce price–time priority across all pre-trade transparent execution venues, which incentivises pre-trade transparent orders, and in turn contributes to price formation and market efficiency more generally.

However, the mandated linkages between markets required to operationalise a trade-through rule can be costly.[89]

214 An alternative view is that, in the Australian context, full price–time priority may not be necessary. A combination of tighter pre-trade transparency controls (see Section H) and market-participant-level order routing may be able to achieve a similar result in terms of efficient price formation and contributing to market efficiency. This is because limit orders are done with price priority on a CLOB or with price improvement off-order book, subject to block trade exceptions.

215 In developing the best execution proposal, we have had regard to the existing market structure and have aimed to have a robust yet simple set of rules. Our proposals are broadly consistent with our 2007 proposal in CP 95: see Appendix 1.

216 We are proposing that market participants take reasonable steps to ensure client orders are handled in a manner that delivers the best total consideration for their client. This relates to the point from which a client order is received to the point where the market participant executes the client order. This will ensure market participants take account of factors such as liquidity in the product and market impact. For example, when there is limited liquidity, the market participant may choose to delay execution until sufficient liquidity is available. Market participants should also have regard to client instructions (e.g. limit orders, market orders, 'fill or kill', 'all-or-none').

Total consideration

217 'Best total consideration' means the price of the equity market product and the costs related to execution, including all expenses incurred by the client which are directly related to the execution, such as execution venue fees, clearing and settlement fees, and any other fees paid by the client to third parties involved in the execution.

218 When executing a basket of products, we would assess total consideration in relation to the entire basket rather than individual components.

219 We expect market participants to focus on the net cost of a purchase or the net proceeds of a sale on the execution venues available and to direct the order to the venue providing the best total consideration.

220 A market participant may consider speed, likelihood of execution, the size and nature of the order, market impact and any other implicit transaction costs, and give them precedence over the immediate price and cost factors if they are instrumental in delivering the best total consideration to non-

[89] H Stoll, 'Market fragmentation', *Financial Analysts Journal*, vol. 56, 2001, pp. 16–20.

professional clients.[90] For example, this may be relevant for a large order in a relatively illiquid product. We expect that implicit costs are unlikely to be a factor for most non-professional client transactions because they typically deal in average-sized orders in liquid equity market products.

Arrangements for professional clients and non-professional clients

221 We propose that professional clients and clients placing orders in sizes of $500,000 and above may nominate factors other than total consideration to be taken into account (e.g. speed and venue choice). The term 'professional client' means 'professional investor' as defined in s9 of the Corporations Act, including entities authorised to operate in financial markets and entities that control at least $10 million.

222 We consider the threshold of $500,000 and above would be met if a client order comprises a single product (e.g. $500,000 NAB shares) or more than one product (e.g. $300,000 NAB shares and $200,000 CBA shares). The rationale for the $500,000 threshold is that:

(a) transactions in sizes above this threshold are significant and factors other than total consideration may play an important role; and

(b) it is the level at which the Corporations Act defines a 'wholesale' transaction and we understand that some market participants may be established to only deal in sizes of $500,000 and above. For these market participants, this threshold should limit the need to categorise their clients into professional and non-professional, as all clients can be treated on the same basis.

223 We consider the proposal for professional clients best reflects the existing market structure in Australia, where professional investors do take account of a range of factors other than total consideration.

224 We will consider a market participant dealing on its own behalf with clients to be executing the client's order, and therefore subject to best execution.

225 A summary of the best execution obligation by client type is summarised in Table 11.

[90] This is also the approach in MiFID Level 2 Directive (2006/73/EC) Recital 67, http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2006:241:0026:0058:EN:PDF.

Table 11: Best execution by client type

Client	Best possible result
Professional client	Default is best total consideration. Client may request that other factors be considered.
Non-professional client in sizes ≥$500,000	Default is best total consideration. Client may request that other factors be considered.
Non-professional clients in sizes <$500,000	Best total consideration.

226 For non-professional clients in transactions below $500,000, total consideration should be the sole factor for consideration at the time of transmitting an order to an execution venue. This is also the view taken in Europe for retail clients.[91] We consider non-professional clients will expect, and should expect, a best total consideration result. Compared to taking account of more complex parameters that may be considered for professional clients, this will be simpler to:

(a) *implement*—details on costs are more readily available and comparable between venues, simplifying the selection of possible venues;

(b) *execute*—order routing capabilities need only take account of cost factors, rather than more complex parameters; and

(c) *evidence*—cost benchmarks are typically more available to assess execution performance against.

Options to limit connections for market participants

227 *Best price*—we note that some market participants may find an assessment of 'best price' (i.e. based on the best price of an equity market product or better) simpler than also taking account of the execution fees inherent in 'total consideration'. While there are not material differences in execution costs, we are satisfied that 'best price' will be sufficient to comply with this requirement, particularly for non-professional clients. However, a market participant must disclose this fact to clients in accordance with proposal G3. If material differences do occur (e.g. if there were a competitor clearing house with materially different prices), we would expect market participants to take account of those differences.

228 *Market operator routing*—we are considering whether market operators should be required to offer SORs to enable smaller market participants to have a single connection to a market and provide certainty to deliver the best price to their clients. We note that this may introduce some complex

[91] MiFID applies best execution to retail and professional clients. The concept of 'professional' in MiFID is not completely aligned with our proposed 'professional' category.

challenges relating to connectivity and order routing arrangements between markets, and raises questions about how exchange membership might work.

229 *Best execution on ASX*—while our proposal implicitly allows market participants to remain connected to a single market, we are also considering whether to explicitly allow market participants to remain connected to just one market for a transitional period (e.g. 12 months) and achieve best execution on that market. This would reduce the burden of connecting to multiple markets and should enable competition to commence sooner than it otherwise might. We would still expect the market participant to take reasonable steps to achieve the best total consideration (or best price) on that market. At the end of the transitional period, the market participant would need to review its best execution approach and determine whether it could consistently achieve the best result on other markets.

Internalisation and crossing client flow

230 Market participants that internalise or cross client orders may only do so in compliance with the best execution obligations. Where a market participant:

(a) deals on its own behalf with a client, we consider this to be the execution of the client's order, and therefore is subject to the best execution rules; and

(b) crosses client orders, the requirements of both clients must be taken into account and they are both owed a duty of best execution.

Commissions

231 Market participants should not structure or charge their commissions in such a way as to discriminate between execution venues. Commissions or spreads charged to clients should ideally reflect the differences in the cost of executing on each venue.

Order flow incentives

232 Order flow incentives can influence how and where market participants direct client orders for execution. Directing orders in return for some benefit may represent a conflict of interest as the market participant may be placing its own interests ahead of its client's interests and compromising best execution.

233 Our proposed best execution rule means that a market participant's order routing decisions on behalf of clients must not be influenced by incentives received for order flow where the result for the client is worse than was otherwise possible.

234 ASIC has advocated the removal of certain incentives (e.g. soft dollar incentives, volume bonuses) for financial advisers. Our preliminary view is

that commissions and other similar forms of remuneration could continue to be used by financial services providers who provide execution-only services.[92]

Bundling

235 Bundling is the practice of providing other services, such as advice, research, data and analytical tools, in conjunction with trade execution. Our best execution rule means that routing a client order to a bundled execution venue or other service provider does not in itself meet the best execution obligation and may not deliver the best result for the client.

Connections to markets

236 As discussed above, our proposals place the obligation on the market participant to route orders, rather than on market operators. It is not our expectation that every market participant must connect to all markets offering equity market products—for example, where a particular execution venue will deliver the best result on a consistent basis for a given subset of a market participant's clients, or where the costs of including more than one venue (to the extent that such costs would be passed on to clients) would outweigh any price improvement gained by doing so. It may therefore be reasonable in some circumstances to decide against connecting to all venues.

237 However, we do expect all market participants to consider their best execution obligation and to review their execution strategy to ensure it is possible to deliver the best result for their clients. If a market participant chooses not to connect to a market, it should consider the advantages of indirect access (i.e. transmitting its client orders to another execution intermediary, rather than executing those orders itself).

238 Our intention has been to create an incentive structure that delivers a 'best total consideration' result without mandating 'best price' and the connections necessary to always deliver best price. We are, however, establishing a competitive market environment and aim to promote competition between the different execution venues offering trading services in equity market products. Therefore, market participants should consider the respective merits of all venues.

[92] ASIC Submission, *PJC Inquiry into financial products and services in Australia: Submission by the Australian Securities and Investments Commission*, August 2009.

Policies and procedures

Proposal

G2 We propose market integrity rules that will require a market participant that is subject to the best execution obligation to:

(a) have adequate internal policies and procedures in place for complying with the obligation; and

(b) review its policies and procedures when there is a material change in circumstances, and do so in any event at least once a year.

Draft Market Integrity Rules G2-1 and G2-2

Your feedback

G2Q1 What are some of the practical steps that market participants will need to take to implement internal policies and procedures?

G2Q2 What are the likely costs of such steps (where possible, please identify the nature of likely costs, quantify the estimated costs and indicate whether such costs will be one-off or ongoing)? Are there likely to be any significant impediments to implementing internal policies and procedures?

G2Q3 Do you have views on whether this proposal is likely to impose any other additional costs or burdens on any class of stakeholder? Where possible, please identify the nature of the likely costs/burdens, quantify the estimated costs (including any assumptions and relevant data) and indicate whether such costs/burdens will be one-off or ongoing.

Explanation and rationale

239 Comprehensive and robust internal policies and procedures relating to best execution, and ongoing review of these policies and procedures, will help to ensure market participants with a best execution obligation are successful in delivering the best result to their clients.

Policies and procedures

240 Best execution policies and procedures should reflect a market participant's strategy for obtaining the best result for the execution of client orders. At a minimum, the procedures and policies should:

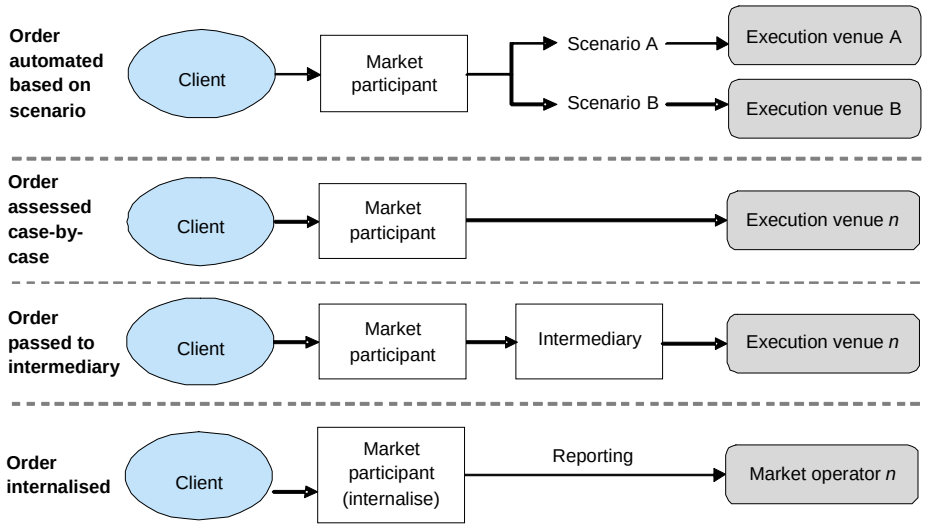
(a) describe the market participant's approach for managing client orders from the time the order is received to the time that it is executed. It should be clear from the description why the market participant's approach will deliver the best result for clients. This should include to achieve best total consideration, as well as other objectives that professional clients may nominate, such as speed, market impact, likelihood of execution and counterparty risk;

(b) identify the execution venues on which client orders may be executed and the circumstances in which orders will be routed to one of the listed venues. This should include a description of the circumstances when trades may be executed away from an execution venue; and

(c) if electronic execution algorithms are used to make order routing decisions, market participants should document the logic of how the algorithm operates, including dependencies and parameters. Any changes to such systems should be documented, including the rationale for the change.

241 A market participant should differentiate its policies and procedures to the extent necessary to comply with the best execution requirement. A market participant may choose to differentiate by liquidity of equity market product, client or order type, execution venue type, or make an assessment on a case-by-case basis, as illustrated in Figure 5. For example, small orders in liquid products may be suited to an automated, high-volume process, whereas closer attention may be necessary for large orders in the same product, including in some instances a case-by-case assessment.

Figure 5: Examples of order routing in best execution policy



242 Where a market participant executes client orders by placing them with an intermediary, the best execution obligation still stands. A market participant that passes client orders must ensure it passes them to an entity whose arrangements will enable the market participant to comply with its own best execution obligations. The market participant must take into account the results that the entity can achieve and should also monitor the quality of the entity's execution on a regular basis.

Review of policies and procedures

243 Market participants should review their approach at least annually to see whether they should make changes to improve overall performance. They should consider whether the relative importance they have assigned to the venues has led them to consistently deliver the best result for their clients and they should monitor compliance with the approach. In order to make an assessment, market participants will need access to adequate data about execution performance of execution venues over a period of time: see proposal G5.

244 Market participants must also review their execution approach whenever a material change occurs that could affect their ability to obtain the best result for clients' orders. What is material will depend to a large extent on the nature and scope of any change. A market participant using only one venue might have to review its approach if a major new venue entered the market.

Disclosure to clients of best execution obligation

Proposal

G3 We propose a market integrity rule that will require a market participant to disclose to clients that it has a best execution obligation and what this means, as well as the venues on which client orders may be executed and the circumstances in which orders may be transmitted to execution venues. This disclosure should be made prior to accepting a client order for the first time.

Draft Market Integrity Rule G3-1

Your feedback

G3Q1 What are some of the practical steps that market participants will need to take to make the necessary disclosures to clients?

G3Q2 How should disclosure to existing clients be managed?

G3Q3 What are the likely costs involved with this proposed obligation (where possible, please identify the nature of likely costs, quantify the estimated costs and indicate whether such costs will be one-off or ongoing)? Are there likely to be any significant impediments to complying with this proposed obligation?

G3Q4 Do you have views on whether this proposal is likely to impose any other additional costs or burdens on any class of stakeholder? Where possible, please identify the nature of the likely costs/burdens, quantify the estimated costs (including any assumptions and relevant data) and indicate whether such costs/burdens will be one-off or ongoing.

G3Q5 What controls could ASIC put in place to ensure the order execution policies disclosed to clients are of high quality and contribute to investors' order routing decisions?

G3Q6 Is it appropriate that this disclosure obligation applies to all clients, including professional clients?

G3Q7 For retail clients, should there be a requirement for an acknowledgement of the disclosure?

G3Q8 What are some of the practical steps that market participants will need to take to make these disclosures?

Explanation and rationale

245 Disclosure of certain execution arrangements to clients will enable those clients to better assess whether they are likely to receive best execution. It should include the most important and/or relevant aspects of the market participant's best execution arrangements.

246 It is appropriate that this disclosure is made to all clients that are owed a duty of best execution so they can assess the quality of execution they receive.[93]

247 Market participants that are already required to provide clients with a Financial Services Guide (FSG) may use the FSG to make disclosures about best execution. However, the proposed rule would not limit how this communication is provided to retail clients.

248 Market participants must not attempt to limit the best execution obligation through disclosure.[94] This can undermine the intention of best execution. We intend to adopt rules that will prevent market participants from contracting out of the obligation.

Evidencing execution performance

Proposal

Demonstrating execution performance and order routing by market participants

G4 We propose market integrity rules that will require a market participant to:

(a) be able to demonstrate to a client, on request, that it has executed the client order in accordance with its best execution arrangements;

[93] MiFID requires disclosure of best execution policies to retail and professional clients (albeit 'professional' under MiFID is a subset of 'professional investor' in Australia).

[94] Experience in Europe has been that some market participants have tried to claim exemption from complying with their best execution obligation by stating in client agreements that they only deal in quotes or on the basis of specific instructions from clients as opposed to client orders. See FSA Report, *MiFID supervisory priorities: Results of wholesale thematic review*, FSA, January 2009, www.fsa.gov.uk/pubs/international/mifid_sup_priorities.pdf.

(b) be able to evidence that its arrangements enable it to consistently deliver the best outcome for its clients;

(c) produce, for each calendar month, a report on its routing of client orders in equity market products during that month, which is made publicly available within one month after the end of the month addressed in the report, and which discloses:

(i) the identity of the venues to which client orders were routed for execution;

(ii) whether the execution venue was directed by the client or not; and

(iii) the nature of the market participant's relationship with those execution venues, including the existence of any incentives received for order flow.

A market participant with order flow in equity market products must comply with this reporting requirement. Client orders include buy or sell orders in equity market products, which are not for the account of the market participant. See Appendix 3 for a more detailed outline of the requirement.

Draft Market Integrity Rules G4-1 to G4-3

Your feedback

G4Q1 Do you have any comments on how ASIC should assess market participant compliance with best execution?

G4Q2 Are there other factors that the order routing report should address?

G4Q3 What should be the frequency of reporting (e.g. monthly or quarterly)? We note that the similar reporting obligation in the US is quarterly.

G4Q4 Should the order routing report be limited to those transactions below a threshold? The SEC Rule 606 requirement has a US$200,000 threshold, which is the block trade size in the US.

G4Q5 Will compliance with this proposed obligation require any changes to your systems or procedures? What are the likely costs of such changes (where possible, please identify the nature of likely costs, quantify the estimated costs and indicate whether such costs will be one-off or ongoing)? Are there likely to be any significant impediments to making these changes?

G4Q6 Do you have views on whether this proposal is likely to impose any other additional costs or burdens on any class of stakeholder? Where possible, please identify the nature of the likely costs/burdens, quantify the estimated costs (including any assumptions and relevant data) and indicate whether such costs/burdens will be one-off or ongoing.

G4Q7 Are transitional arrangements necessary? What are your views on what the transitional time period and arrangements should be?

Execution quality reporting by execution venues

Proposal

G5 We propose a market integrity rule that will require an operator of an execution venue to produce, for each calendar month, a report on all orders that it received for execution from all sources, which is made publicly available within one month after the end of the month addressed in the report and which:

(a) categorises each equity market product into:

(i) five types of orders—market orders, marketable limit orders, inside-the-quote limit orders, at-the-quote limit orders, and near-the-quote limit orders; and

(ii) five order size groups—≤$199, $200–$499, $500–$999, $1000-$4999, and ≥$5000; and

(b) includes the following statistics:

(i) liquidity measures, including the number and value of orders received, cancelled and executed by the execution venue, and the number and value of orders that were routed to another execution venue; and

(ii) trade execution statistics, including the value of trades executed on the execution venue in five time-bands (0–2.999 milliseconds, 3–9.999 milliseconds, 10–19.999 milliseconds, 20–29.999 milliseconds and ≥30 milliseconds), the value of trades from the execution of orders that were not pre-trade transparent, the average realised spread, the average access fees, the average effective spread, the average price improvement, the frequency of trade-throughs, and the average trade-through amount per unit.

See Appendix 3 for a more detailed outline of the proposal.

Draft Market Integrity Rule G5

Your feedback

G5Q1 Are there other factors that the execution quality reports should address?

G5Q2 Are the proposed five categories of order size appropriate for the Australian market?

G5Q3 Are the time-bands used to assess speed and certainty of execution appropriate? If not, what time-bands should be used?

G5Q4 Is monthly reporting adequate? If you consider it should be more or less frequent, please explain why.

G5Q5 Should reporting be limited to only those products that are available for trading on more than one market?

G5Q6 Would it be useful to have information about partially or fully hidden liquidity? If so, what measures of that liquidity would be most informative?

G5Q7 Are milliseconds a sufficiently precise time stamp, or should it be microseconds—given the speed of trading?

G5Q8 The reporting criteria will need to keep pace with market developments. What should be the process for modifying the criteria?

G5Q9 Will compliance with this proposed obligation require any changes to your systems or procedures? What are the likely costs of such changes (where possible, please identify the nature of likely costs, quantify the estimated costs and indicate whether such costs will be one-off or ongoing)? Are there likely to be any significant impediments to making these changes?

G5Q10 Do you have views on whether this proposal is likely to impose any other additional costs or burdens on any class of stakeholder? Where possible, please identify the nature of the likely costs/burdens, quantify the estimated costs (including any assumptions and relevant data) and indicate whether such costs/burdens will be one-off or ongoing.

G5Q11 Are transitional arrangements necessary? What are your views on what the transitional time period and arrangements should be?

Format for the reports

Proposal

G6 The format of the order routing and execution quality report will be set by ASIC.

Your feedback

G6Q1 Is there a preferred electronic format?

G6Q2 Do you currently create reports containing information on order routing and execution quality in a particular format? If so, will any changes to the format impose additional costs on you (where possible, please identify the nature of likely costs, quantify the estimated costs and indicate whether such costs will be one-off or ongoing)? Are there likely to be any significant impediments to making any changes?

Explanation and rationale

249 ASIC does not intend to approve market participants' best execution policies and procedures, nor do we intend to test that every individual transaction achieves the best result. However, we do expect market participants to be able to demonstrate that:

(a) their best execution policies and procedures enable them to consistently deliver the best result for clients. For example, statistics that show prices achieved or achievable on each venue compared to the best bid

and offer (consolidated) at the time. They should regularly review and monitor the quality of their execution (as per proposal G2(b)); and

(b) they have complied with their policies and procedures.

The policies and procedures need to be sufficiently detailed for ASIC to make this assessment, which we intend to embed into our existing participant supervision arrangements.

250 It is therefore important for there to be adequate data and mechanisms to measure performance and for those mechanisms to be visible and appropriately used; this should drive more vigorous competition among market participants to provide the best result for clients.

251 Consolidated and comparable information about orders and executed trades is necessary to facilitate the evidencing of execution performance against the best prices at the time. Section K outlines our proposal for creating a mechanism to consolidate pre-trade and post-trade transparency information to, in part, facilitate this objective.

252 In addition, and given the flexibility we have built into our approach to best execution for professional clients and other clients dealing in large trades, it is important that there is readily accessible information to allow these clients to evaluate the trade-off between different elements of execution quality, including price, speed, probability of execution and size, as well as execution venue. For example, and as discussed in REP 215, this is achieved in the US through the publication of:

(a) monthly reports on execution quality by market centres[95] (SEC Rule 605), which reflect some of these other factors; and

(b) quarterly order routing reports by broker–dealers (SEC Rule 606), including disclosure of non-directed orders, top 10 market centres, and discussion of the material aspects of a market participant's relationship with each market.

253 Some market operators and market participants in the US have outsourced their execution quality reports to vendors such as Thomsons TTA reporting.

254 Studies have shown that these reports have exerted a positive impact on market quality (i.e. contributing to tighter spreads) and that venues reporting low execution costs and fast fills receive more order flow.[96] There is more discussion on this research in REP 215, paragraphs 196–203.

[95] A market centre is any exchange market maker, OTC market maker, alternative trading system, national securities exchange or national securities association.

[96] For example, Xin Zhao & Kee H Chung, 'Information disclosure and market quality: The effect of SEC Rule 605 on trading costs', *Journal of Financial and Quantitative Analysis*, vol. 42, No. 3, September 2007, pp. 657–82, and E Boehmer, R Jennings & L Wei, 'Public disclosure and private decisions: The case of equity market execution quality', *Review of Financial Studies*, vol. 20, 2007, pp. 315–58.

255 Many respondents to the SEC's recent concept release[97] noted that these reports provide an important view into execution quality, have led to improved and more consistent competition and have been valuable comparative tools. Some suggested the reports should be updated to reflect finer time increments (e.g. milliseconds), provide an insight into non-pre-trade transparent orders and capture large transactions. It is possible that the SEC may amend the reports to reflect the feedback. Similar reporting has been proposed by the Canadian regulators[98] and more recently by CESR.[99]

256 This type of disclosure is particularly important in today's market where client order flow is increasingly divided among many different venues (e.g. ASX's CLOB, CentrePoint, VolumeMatch, over-the-counter and various broker and agency crossing systems). Execution quality reports will allow users to analyse order executions for a particular equity market product or for any particular group of equity market products, as well as for any size or type of orders across those groups of equity market products. This will assist market participants in determining execution venues to include in their best execution policies.

257 Taken together, the reports should substantially improve the ability of clients to evaluate what happens to their orders after they have been provided to a market participant for execution. This should encourage clients to choose market participants who more consistently provide the best result. We view the reporting as a fundamental component of our flexible approach to best execution, particularly in the absence of a trade-through rule.

258 More details on the interaction of these reports, including an example of the possible format for the reports, is at Appendix 3.

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[97] SEC, *Comments on File No. S7-02-10*, www.sec.gov/comments/s7-02-10/s70210.shtml.
[98] Proposed Amendments to NI 21-101 Marketplace Operation and Companion Policy 21-101CP (2007) 30 OSCB (Supp-3), 20 April 2007, www.osc.gov.on.ca/documents/en/Securities-Category2/rule_20070420_21-101_pro-amend.pdf; Amendments to National Instrument 21-101 Marketplace Operation (2008) 31 OSCB 10136, 17 October 2008, www.osc.gov.on.ca/documents/en/Securities-Category2/rule_20081017_21-101_amd-21-101and23-101.pdf; Notice of Proposed Amendments to National Instrument 21-101 Marketplace Operation and National Instrument 23-101 *Trading rules* (2008) 31 OSCB 10033, 17 October 2008, www.osc.gov.on.ca/documents/en/Securities-Category2/rule_20081017_21-101_noa-21-101and23-101.pdf.
[99] CESR Technical Advice, *CESR technical advice to European Commission in the context of the MiFID Review: Equity markets*, (CESR/10-802), CESR, 29 July 2010.

H Pre-trade transparency and price formation

Key points

There has been growth in the use of dark pools of liquidity overseas and we believe this trend is also emerging in Australia. We are concerned this may impact the price formation process on markets.

We propose that market participants must display orders and quotes on a pre-trade transparent market subject to the following exceptions:

- large block and portfolio transactions;
- where the order would result in a trade of $20,000 or more and there is price improvement;
- undisclosed orders in a pre-trade transparent order book valued at $20,000 or more; and
- orders done outside normal trading hours.

259 Pre-trade transparency refers to information on bids and offers being made publicly available before trades occur. Together with post-trade information, it is generally regarded as central to both the fairness and efficiency of a market, and in particular to its liquidity and quality of price formation.[100]

260 Pre-trade transparency enables investors to identify trading opportunities, contributing to investor confidence that they will be able to execute a trade. Investor confidence in a market can incentivise other investors to participate, contributing to liquidity and stimulating more competitive pricing. It also plays an important role for listed companies in valuing their assets and their ability to raise further funds, and it contributes to market participants' ability to achieve and evidence best execution. We are proposing that a high level of trading interest is immediately pre-trade transparent.

261 Currently, in Australia, market operators must, to the extent that it is reasonably practicable to do so, do all things necessary to ensure that the market is fair, orderly and transparent: s792A(a) of the Corporations Act. In determining whether a market operator meets this requirement, we have regard to, among other things, the degree of pre-trade and post-trade transparency, taking into account the type of facility.

262 There have always been ASX rules requiring market participants to transact on-market (or on the CLOB since the move to electronic trading) subject to

[100] IOSCO Report, *Transparency and market fragmentation* (IOSCOPD124), Technical Committee of IOSCO, November 2001.

exceptions for large orders. This is based on the notion that price formation is most efficient when full supply and demand is allowed to interact via an auction. This central auction process is important because it:

(a) establishes a reference price, which in addition to its role in trading is important for capital allocation decisions and capital raising; and

(b) creates a deeper pool of 'accessible' liquidity than would otherwise be available, which keeps spreads tight and costs down.

Our pre-trade transparency proposals are broadly in line with the basis for the existing ASX arrangements.

Non-displayed liquidity ('dark liquidity')

263 There are some circumstances where pre-trade transparency can adversely impact a market and the investor in terms of price volatility and higher execution costs. For example, a large order can result in significant price movements, where other traders can act on the information before it is filled. In this context, having no pre-trade transparency ('dark liquidity') reduces the possibility of leakage and therefore lowers the costs of trading for these investors.

Non-displayed pools of liquidity ('dark pools') and internalisation

264 New technologies and trading strategies have made it more efficient to execute transactions without submitting orders to a market that will display them (such as ASX's CLOB). Overseas, this has resulted in significant growth in the number of non-pre-trade transparent electronically accessible pools of orders, such as crossing systems ('dark pools'). For example, TABB Group estimates that 10.2% of total volume traded in the US in June 2010 was executed in dark pools, compared to 4.7% in November 2007.[101] In addition, a further 17.5% of trades were internalised by broker–dealers without any pre-trade transparency.[102]

265 In Australia, on-market crossings (i.e. crossings below block size) accounted for around 13% and off-market crossings (i.e. block size crossings) 19% of total trading in August 2010: see Figure 1 in Section B. The on-market crossing figure has remained reasonably constant over time; however, the off-market crossing figure fluctuates. Due to data limitations, it is not possible to determine what proportion of these figures is attributable to dark pools. It is reasonable to expect that a significant portion of the on-market

[101] TABB Group Liquidity Matrix, www.tabbforum.com.
[102] SEC Concept Release, *Equity market structure* (Release No. 34-613358), SEC, 13 January 2010.

crossings and some portion of the off-market crossings are done in dark pools.

Undisclosed orders

266 Many market operators offer partially undisclosed orders on a CLOB (e.g. iceberg orders, which expose a small portion of the total order volume). More recently, some CLOBs have completely undisclosed orders. Undisclosed orders are typically more accessible than separate dark pools that have access restrictions and pose liquidity search challenges. Typically, these undisclosed orders have lower execution precedence than pre-trade transparent orders.

Impact of dark pools and undisclosed orders on price formation

267 There is an inherent tension between the short-term private advantages for a subset of the market of trading in the dark (i.e. potential price improvement) and the long-term public good of contributing to the price formation process, which gives investors confidence and promotes the interests of issuers and the broader community in an efficient secondary market for equities.

268 The former may seem appealing, but there is evidence to suggest that too much dark liquidity may result in wider spreads and worse prices for trades done both on pre-trade transparent markets and in the dark. This is because spreads in pre-trade transparent markets are likely to widen in response to there being less uninformed transparent orders (i.e. because traders want to avoid trading with informed traders in order to reduce the risk of the market moving against them after they enter into a position).[103] Wider spreads means worse prices on the CLOB, as well as for those transacting in the dark, because off-order book trades reference prices on the CLOB.

269 There are a number of other incentives for orders to shift into the dark:

(a) market participants executing client orders off-order book may save on execution fees charged by market operators;

(b) technology is making it cheaper and more efficient to match client flow off-order book; and

(c) some client brokers are receiving payment from other brokers for their order flow.

270 There is recent empirical evidence that the increasing volumes of off-order book trading and internalisation in the US have adversely impacted liquidity

[103] D Easley, NM Keifer & M O'Hara, 'Cream-skimming or profit sharing? The curious role of purchased order flow', *Journal of Finance*, vol. 51, 1996, pp. 811–33.

provision and price formation through wider spreads, reduced depth in the market, increased price impact and increased volatility.[104]

271 It is also becoming a concern in Europe with a recent report noting that 'if the trading volume executed on this [over-the-counter] segment of the market continues to increase, the price discovery mechanism happening on the "lit" [i.e. pre-trade transparent] market could be severely impacted.'[105]

272 In practice, this means potentially higher overall costs of trading for investors. For companies, it may impact the accuracy of valuations of their assets, which in turn may impact their fundraising activities.

273 Price formation may also be undermined by fragmentation of liquidity. The growing number of independent dark pools in the US, Europe and Canada is raising liquidity search challenges for market participants. In addition to the cost associated with connecting to many different pools, investment by market participants is required to route orders to find the hidden liquidity. There may also be adverse impacts on market efficiency if orders cannot find one another.

274 Regulators in the US, Canada and Europe are all considering the impact of dark liquidity on price formation, including price volatility and spreads, and the functioning of markets more generally.[106] This is also something that IOSCO is considering in its consultation paper on dark liquidity.[107]

275 In the US, the number of active dark pools increased from 10 in 2002 to 29 in 2009. To address the growth in dark pools, the SEC is considering lowering the volume threshold at which dark pools may remain dark from 5% to 0.25%.[108] This will encourage more pools to become pre-trade transparent. In Europe, CESR recommended that there be a limit on the amount of business that can be executed on broker crossing systems before they are required to become a multilateral trading facility (MTF).[109]

276 We are equally concerned about the potential adverse effect of this trend on price formation in Australia. While there are comparatively few dark pools

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[104] D Weaver, 'Off-exchange reporting and market quality in a fragmented market structure', Comment on Concept Release, *Equity market structure* (Release No. 34-61358), SEC, 16 April 2010, www.sec.gov/comments/s7-02-10/s70210-127.pdf.
[105] Celent Research Report, *MiFID: Spirit and reality of a European financial markets directive*, Celent, 27 September 2010, www.celent.com/124_3230.htm.
[106] SEC Concept Release, *Equity markets structure* (Release No. 34-613358), SEC, 13 January 2010; IIROC Notice, *Update on forum to discuss CSA/IIROC Joint Consultation Paper 23-404: Dark pools, dark orders, and other developments in market structure in Canada and next steps* (10-0156), Investment Industry Regulatory Organization of Canada, 28 May 2010; CESR Technical Advice, *CESR technical advice to European Commission in the context of the MiFID Review: Equity markets* (CESR/10-802), CESR, 29 July 2010; Joint Consultation Paper, *Dark pools, dark orders, and other developments in market structure in Canada* (23-404), Canadian Securities Administrators and Investment Industry Regulatory Organization of Canada, 30 September 2009.
[107] IOSCO Consultation Report, *Issues raised by dark liquidity*, CR05/10, October 2010.
[108] SEC Proposed Rule, *Regulation of non-public trading interest* (Release No. 33-60997), SEC, 13 November 2009.
[109] CESR Technical Advice, *CESR technical advice to European Commission in the context of the MiFID Review: Equity markets* (CESR/10-802), CESR, 29 July 2010.

in Australia today, there is a risk of proliferation if we wait for the debate to play out overseas before we take action.

277 There is also a risk that if we do not improve the quality of data available to regulators on dark pool activity, we will not be able to accurately assess its impact. For example, the proportion of dark liquidity may continue to appear relatively constant, but the make-up of liquidity may significantly change. In the US, while the proportion of off-order book trading has increased over recent years, considerable retail liquidity has moved off-order book and the majority of trading on CLOBs is now high-speed trading.

278 We have an opportunity to pause and assess the impact of dark pools in Australia before they proliferate, which is important because it will be more difficult to alter the framework after the market has changed. We propose to make a measured adjustment to the framework that will minimise the potential for significant fluctuations in pre-trade transparent and dark liquidity. It will continue to permit some dark liquidity for trading that may otherwise have market impact, while limiting the possibilities and incentives for certain liquidity to shift into the dark.

279 See REP 215, paragraphs 208–247, for more discussion on dark pools.

Orders that should be pre-trade transparent

Proposal

H1 We propose market integrity rules that will require:

(a) a market operator to immediately make public certain information about current bid and offer prices that are available through its systems, subject to the exceptions below. The information displayed should be complete, accurate and up-to-date. We intend to specify the detail about how to comply once we have taken into account the feedback from this consultation paper;

(b) a market participant to display orders relating to equity market products on a licensed market, subject to the following exceptions:

(i) *block trades*—where the consideration for the trade is not less than $1 million for highly liquid equity market products (category B) (outlined in paragraphs 282–284) and $500,000 for all other equity market products. ASIC will assess at least annually equity market products that fall into each category on the basis of 2.5% average daily turnover and will make the list publicly available;

(ii) *large portfolio trades*—where under a single agreement there are at least 10 purchases or sales, the market participant acts as agent for both the buyer and seller of the portfolio or as principal buys from or sells to the client, and the consideration

of each purchase or sale is not less than $200,000 and the aggregate consideration is not less than $5 million;

(iii) *price improvement trades*—where the price is determined to be within the spread of the best bid and offer on all markets and the trade would result in a size equal to or greater than $20,000;

(iv) *undisclosed orders*—where the order is a non-pre-trade transparent order on a pre-trade transparent order book and the size of order is greater than $20,000; and

(v) *out-of-hours trading*—where trades are conducted outside normal trading hours.

If an order meets one of the exceptions, the exception will no longer apply if the order is partially filled and the residual ('stub') of the order falls below the relevant threshold.

Draft Market Integrity Rules H1-1 to H1-8

Your feedback

H1Q1 Do you have any views on a tiered block trade regime?

H1Q2 Is there value in also having a $2.5 million threshold for the largest 12 equity market products and/or a $200,000 threshold for the less liquid equity market products, as described in paragraphs 283–284? What impact are these additional thresholds likely to have on transparency? What would be the practical impact on market operators and market participants to adapt systems to reflect the new thresholds?

H1Q3 Should the price improvement exception reflect 'meaningful' price improvement and how should 'meaningful' be interpreted?

H1Q4 What will be the impact on systems and business volumes of imposing a $20,000 threshold and price improvement on dark trades? Should a size limit apply to all equity market products or just the more liquid equity market products (e.g. ASX 200)? Or should the threshold be tiered based on liquidity?

H1Q5 Should a 'stub' be transparent, as proposed, if its residual size is below the relevant pre-trade exception threshold? Should there be an exception for iceberg and other partly transparent orders given they in part contribute to price formation?

H1Q6 'Pegged orders' are discussed in REP 215, paragraphs 253–256. What impact do pegged orders have on market integrity? Should pegged orders reference another market or should they reference market-wide prices? Why?

H1Q7 The various pre-trade transparency thresholds will need to keep pace with market developments. What should be the frequency and process for modifying the thresholds?

H1Q8 Are there other steps that ASIC could take to minimise the shift of trading into dark pools? For example, should we consider reintroducing a minimum exposure time for crossed trades (i.e. like the 10-second priority crossing rule)?

H1Q9 Will compliance with this proposed obligation require any changes to your systems or procedures? What are the likely costs of such changes (where possible, please identify the nature of likely costs, quantify the estimated costs and indicate whether such costs will be one-off or ongoing)? Are there likely to be any significant impediments to making these changes?

H1Q10 Do you have views on whether this proposal is likely to impose any other additional costs or burdens on any class of stakeholder? Where possible, please identify the nature of the likely costs/burdens, quantify the estimated costs (including any assumptions and relevant data) and indicate whether such costs/burdens will be one-off or ongoing.

Explanation and rationale

280 Our proposals reflect our concern about trends towards off-order book trading and that this adversely impacts price formation and exacerbates fragmentation and search challenges. Our proposals also set a single standard for pre-trade transparency, which as IOSCO noted in its 2001 *Report on transparency and market fragmentation*[110] is important when there are multiple execution venues.

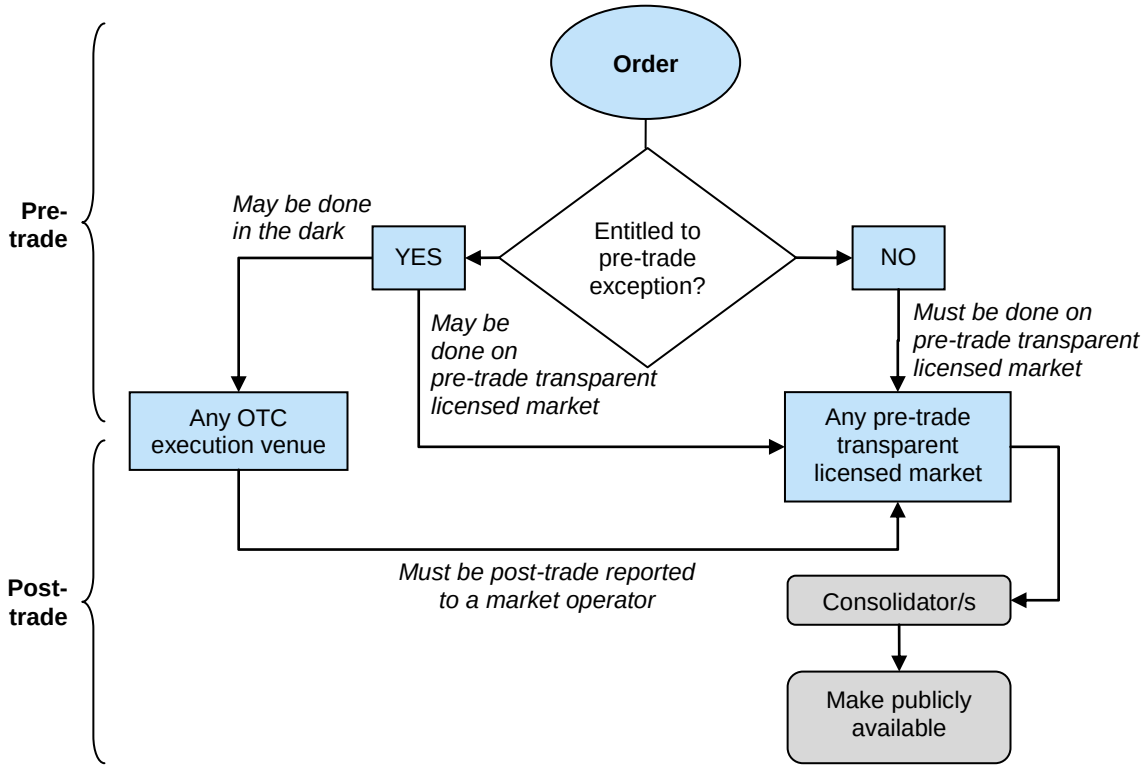
281 We propose that unless an order satisfies defined exception criteria, orders relating to equity market products must be displayed on a market operator's CLOB, as illustrated in Figure 6. There are a limited number of exceptions to the pre-trade transparency obligation.

Exception for block trades

282 ASX currently has a threshold of $1 million. We propose a tiered regime to better reflect trading interest in equity market products. ASX consulted in 2007 and 2008 on creating a tiered system. Research undertaken on behalf of ASX at the time indicated that a product-by-product approach was theoretically the optimal solution, with thresholds set at 2.5% of average daily volume (ADV).[111] This was chosen as the point beyond which the net benefit—in terms of price impact—of taking trades off the order book would become positive. ASX concluded that since liquidity in each product is different, this approach would not be practical because it would result in a different threshold for each product and may vary on a daily basis.

[110] IOSCO Report, *Report on transparency and market fragmentation* (IOSCOPD124), Technical Committee of IOSCO, November 2001.
[111] The research was conducted by academics from the University of Sydney—Alex Frino, Jun G Li, and Andrew Lepone.

Figure 6: Proposed pre-trade transparency flow



283 Instead, ASX proposed three tiers, with the allocation of products to each tier done on the basis of a 2.5% ADV assessment:

(a) $2.5 million for the top 12 products;

(b) $1 million for the next 20 products; and

(c) $500,000 for the remaining products.

284 Respondents to ASX's consultation broadly supported the tiered approach, but most thought $2.5 million for the top tier was too high. Given the elapsed time since ASX conducted its research, ASIC's Office of the Chief Economist reviewed trade data earlier this year to assess whether the thresholds are still relevant. It concluded that:

(a) 12 products would fall within the $2.5 million threshold based on 2.5% of ADV; and

(b) 13 would fall within the $1 million threshold.

It also noted that most products did not trade enough to benefit from any block threshold and noted that a lower threshold such as $200,000 could be considered: see Table 12. We are seeking feedback on what the tiers should be and the frequency for reviewing the products in each tier.

Table 12: Possible thresholds for block trade exception

Category and threshold	No. of products	Product symbols
Category A: $2.5 million	12	BHP, CBA, RIO, WBC, ANZ, NAB, TLS, WDC, WOW, WES, WPL, MQG
Category B: $1 million	13	NCM, QBE, LGL, STO, CSL, IPL, QAN, BSL, AMP, SUN, ORI, AXA, FGL
Category C: $500,000	23	ORG, SGP, FMG, OSH, WOR, BXB, AIO, AMC, CPU, CCL, MGR, ASX, LEI, TOL, AWC, GPT, IAG, TCL, OZL, FXJ, GMG, SHL, DXS
Category D: $200,000	All others	All other equity market products

285 We note that there has been debate in Europe about the MiFID large-in-scale thresholds. In particular, it has been asserted that too wide a gap between the average order size and the large-in-scale thresholds in MiFID may result in investors not receiving adequate protection from market impact and that it may encourage them to execute away from licensed markets. CESR has recommended to the European Commission that it undertake further analysis to determine if the thresholds should be lowered.[112]

286 On the basis of our analysis and responses to ASX's consultation, we propose to have at least a $1 million threshold for the highly liquid products and a $500,000 threshold, where products will be allocated on the basis of an ADV of 2.5% (as described in paragraph 282). We are seeking feedback on also having a $2.5 million and $200,000 threshold.

287 ASIC will periodically review the products that fall within each threshold and make the information publicly available.

Exception for large portfolio trades

288 The portfolio exception is similar to existing ASX Procedure 4810. We consider this works well and there is no need for change, although we are interested in your feedback on this issue.

Exception for price improvement trades

Options considered

289 We considered proposing only three exceptions to the pre-trade transparency obligation—block order, large portfolio orders and orders executed out-of-

[112]CESR Technical Advice, *CESR technical advice to European Commission in the context of the MiFID Review: Equity markets* (CESR/10-802), CESR, 29 July 2010.

hours—on the basis that these types of trades should be allowed to occur without pre-trade transparency because of the impact the trade may have on prices on CLOBs. However, we also consider there is some benefit in permitting non-pre-trade transparent trading below portfolio and block size in larger than average size because it:

(a) may limit market impact and provide access to more liquidity, particularly in less liquid products;

(b) may incentivise innovation in trading strategies and order types, as has been the case overseas; and

(c) in some circumstance, provides an opportunity to achieve meaningful price improvement (compared to the CLOB) for larger trades.

290 However, if this type of exception is used too liberally and if a significant portion of trading shifts into dark pools, there is a risk it could undermine price formation. As noted in paragraph 270 and in REP 215, paragraphs 235–243, there is recent evidence that increasing volumes of off-order book trading have adversely impacted price formation in the US.

291 While the proportion of priority crossings has not changed substantially over time, we are concerned about the impact on price formation if the trend experienced overseas occurs in Australia. The 10-second priority crossing rule that was in place on ASX until November 2009 constrained the volume of priority crossings.[113] We understand that a number of market participants have moved or are considering arrangements for moving client order flow into the dark.

292 We considered two options for addressing this concern:

(a) the US style trade-through (described in Section G) and a volume threshold that applies to alternative trading systems (ATSs)—that is, when a venue's volume of total market trading in a particular product reaches a certain percentage (currently 5% in the US, but the SEC is considering reducing it to 0.25%),[114] it must be fully pre-trade transparent; and

(b) imposing a minimum size requirement on trades that are executed off-pre-trade transparent order books and require that these trades be executed within the spread of the best bid and offer on all markets.

293 We would like to limit the extent of fragmentation and are therefore proposing the option in paragraph 292(b). The first option may be appropriate for the US market where there is an ATS regime and trading is already fragmented between execution venues. However, in the Australian

[113] The rules for on-order book priority crossings were changed on 30 November 2009. Prior to the change, the executing participant was required to appear in the market at the crossing price, create a one-price step market for at least 10 seconds, and only then could it execute the crossing. In November 2009, the need to wait 10 seconds was removed.
[114] SEC Proposed Rule, *Regulation of non-public trading interest* (Release No. 33-60997), SEC, 13 November 2009.

context, where we are starting from a single market, there is a risk that the first option may result in greater fragmentation—that is, the thresholds may be circumvented through the creation of new, linked dark pools.

Determination of an appropriate threshold

294 We are proposing a $20,000 threshold that would apply to the size of the resulting trade rather than the size of the order.

295 To help inform our thinking on an appropriate threshold, we have analysed ASX trading data for the 12 months of September 2009 to August 2010. The data is summarised in Table 13 and shows that:

(a) priority crossings are getting smaller.[115] The average trade size is down by 24% in August 2010 compared to September 2009 and the median is down by 33%;

(b) the number of priority crossings is increasing—up 39% in August 2010 compared to September 2009; and

(c) the value of priority crossings was higher in August 2010 than September 2009, but was lower on average over the 12-month period.

Table 13: On-market crossings on ASX: September 2009 to August 2010

Data set	Average*	Median	Number	Value
September 2009	$15,600	$1,540	929,641	$14.506b
August 2010	$11,800	$1,028	1,289,053	$15.188b
Average over 12 months: September 2009 to August 2010	$13,900	$1,254	983,745	$13.498b

* rounded to the nearest hundred

Source: ASX data

296 The average trade size on the CLOB remained reasonably constant over the 12-month period at around $8000 (with the exception of April 2010 when it was substantially higher—$9287). The median for CLOB trades fluctuated between $1704 and $1171.

297 Our aims in setting a threshold are to balance the benefits of pre-trade transparency to the wider market with the market impact of individual orders. That is:

(a) for the threshold to be high enough to ensure that investors will be able to find larger than average size in dark pools, rather than having the average trade size in these pools decline to similar levels on the CLOB.

[115] We note that the priority crossing data includes priority crossings and accidental crossings.

Therefore, we believe the threshold should be higher than the average size of CLOB trades and on-market crossings;

(b) low enough such that orders that may have some 'market impact' have choice in where to execute (i.e. with or without pre-trade transparency); and

(c) to ensure that at least the existing proportion of pre-trade transparent orders remains pre-trade transparent and accessible.

298 There is not a clear indicator for determining a threshold to meet these aims. We believe a threshold of $20,000 would meet our aims. Based on our analysis, this would mean that the proportion of trades done in the month of July 2010 that relied on the priority crossing and that would be entitled to rely on it with this threshold would be around 90% by value and 6% by number of trades. It is our view that this threshold should provide sufficient incentive for orders to remain on pre-trade transparent markets and contribute to price formation, while being low enough to avoid market impact. We will keep the threshold under review.

299 In practice, this threshold would mean that venues offering priority crossings or relying on a reference price (e.g. ASX's CentrePoint) would be required to prevent trades from matching at sizes below $20,000 or they would have to display their order on a market operator's CLOB.

300 We recognise this proposal may mean that some investors might receive a lower price than if they are entitled to transact off-order book with price improvement. However, experience in the US has been that off-order book retail orders do not receive 'meaningful price improvement'—often only 0.0001 to 0.001 cents per unit.[116] This equates to around $0.30 to $3 on an average CLOB trade in Telstra. In addition, and as described in paragraph 270, there is empirical evidence suggesting that significant off-order book trading can lead to wider spreads on a CLOB, which ultimately means worse prices for trading done on CLOBs and off-order book, where the price references CLOB prices.

301 While other regulators are considering a similar type of order size requirement (e.g. CESR), we are not aware of other jurisdictions that have implemented one. We will keep our proposal under review and may consider modifying or removing the threshold if warranted in the future.

302 We discuss in REP 215, paragraphs 253–256, issues associated with certain orders that reference prices on another market, including 'pegged orders' (i.e. where a specified quantity of a product is set to track the best bid and offer on the primary market).

[116] Bright Trading, *LLC response to the SEC round table discussion on equity market structure of June 2, 2010*, www.sec.gov/comments/4-602/4602-29.pdf.

Exception for undisclosed orders

303 We are also proposing to apply the $20,000 threshold to undisclosed orders (or partly undisclosed—for example, iceberg) in a pre-trade transparent order book. However, the price does not need to be within the spread of the best bid and offer as we are proposing for the price improvement exception. This is because the spread of many products may already be at the tick size. Importantly, pre-trade transparent orders must always take priority over undisclosed orders in a pre-trade transparent book. This means that undisclosed orders do not receive time priority. In our view, pre-trade transparent orders should be rewarded for taking a risk by displaying a price and contributing to price formation. Giving them priority should also act as an incentive for displaying orders.

Exception for trades done out of hours

304 We propose that trades done outside normal trading hours (i.e. outside normal 'matching' hours, which includes auction periods) also be exempt from pre-trade transparency. Where the operating hours vary between markets, we deem 'normal trading hours' to be the earliest opening time and latest closing time of all market operators offering equity market products. ASIC will communicate the relevant times to the industry.

305 Market participants must not intentionally and systematically delay transacting on a CLOB during normal trading hours to avail themselves of this exception when good execution is available on the CLOB. We are considering whether to create a market integrity rule to this effect.

'Stubs'

306 For all orders meeting one of the exceptions described above, the exception will no longer apply if the order is partially filled and the residual ('stub') of the order falls below the relevant threshold. This is consistent with the way the existing ASX crossings work.

Content of pre-trade disclosures

Proposal

H2 We propose market integrity rules that will require a market operator to make pre-trade information available on a continuous real-time basis during normal trading hours, as follows:

(a) *for order-driven markets*[117]—the minimum information to be disclosed is the aggregate number of orders and aggregate volume

[117] An order-driven market is one in which all of the orders of both buyers and sellers are displayed.

at each price level per equity market product available on the facility; and

(b) *for quote-driven markets*[118]—information should be disclosed on the current best bid and offer price per equity market product of each market maker and the volume at those prices. The quotes that are published should only be those that represent binding commitments.

The fields that should be published are outlined in Appendix 4, Table 21.

Draft Market Integrity Rules H2-1 and H2-2

Your feedback

H2Q1 Do you have any views on the data elements that should be publicly disclosed and collected for provision to ASIC?

H2Q2 Do you have views on whether this proposal is likely to impose any additional costs or burdens on any class of stakeholder? Where possible, please identify the nature of the likely costs/burdens, quantify the estimated costs (including any assumptions and relevant data) and indicate whether such costs/burdens will be one-off or ongoing.

Explanation and rationale

307 Our proposal is broadly consistent with existing information that is published by ASX and this information has been fit for purpose.

Priority for pre-trade transparent orders

Proposal

H3 We propose a market integrity rule that will require pre-trade transparent orders to take time priority over undisclosed orders within a CLOB.

Draft Market Integrity Rule H3

Your feedback

H3Q1 Should the requirement for pre-trade transparent orders to always take time priority over undisclosed orders apply in all sizes? For example, should orders that meet the block threshold be entitled to have time priority, as ASX's current undisclosed orders do?

[118] A quote-driven market only displays the bid and ask offers of designated market makers/dealers.

H3Q2 Will compliance with this proposed obligation require any changes to your systems or procedures? What are the likely costs of such changes (where possible, please identify the nature of likely costs, quantify the estimated costs and indicate whether such costs will be one-off or ongoing)? Are there likely to be any significant impediments to making these changes?

H3Q3 Do you have views on whether this proposal is likely to impose any other additional costs or burdens on any class of stakeholder? Where possible, please identify the nature of the likely costs/burdens, quantify the estimated costs (including any assumptions and relevant data) and indicate whether such costs/burdens will be one-off or ongoing.

Explanation and rationale

308 Investors that take a risk in displaying their limit orders and contribute to price formation should be rewarded for taking this risk—that is, priority over undisclosed orders is their reward. This principle is consistent with Principle 3 of IOSCO's recent consultation report on dark liquidity.[119]

Reporting requirements for operators of dark pools of liquidity

Proposal

H4 We propose a market integrity rule that will require a market operator and a market participant operating dark pools to report to ASIC monthly on:

(a) the nature of the dark pool, including the access criteria, how orders are prioritised, matched and executed, how the price is determined and whether the dark pool operator's proprietary flow is able to interact with client flow, and how conflicts are managed;

(b) the number of Australian clients whose orders were executed through the service during the preceding month;

(c) the number and value of all trades executed through the service in the preceding month and the proportion of these trades that were on behalf of professional and non-professional clients; and

(d) the average and median trade size for professional and non-professional clients.

[119] IOSCO Consultation Report, *Issues raised by dark liquidity*, CR05/10, October 2010, p. 27.

Draft Market Integrity Rule H4

Your feedback

H4Q1 Will compliance with this proposed obligation require any changes to your systems or procedures? What are the likely costs of such changes (where possible, please identify the nature of likely costs, quantify the estimated costs and indicate whether such costs will be one-off or ongoing)? Are there likely to be any significant impediments to making these changes?

H4Q2 Do you have views on whether this proposal is likely to impose any other additional costs or burdens on any class of stakeholder? Where possible, please identify the nature of the likely costs/burdens, quantify the estimated costs (including any assumptions and relevant data) and indicate whether such costs/burdens will be one-off or ongoing.

H4Q3 Will this proposal have any other impacts on operators of dark pools?

H4Q4 Is there any reason that an operator of a dark pool will not know the domicile of all clients?

Explanation and rationale

309 Given the rapid development of dark pools overseas, we intend to monitor their development in Australia closely. We are particularly interested in the nature of the pools, volume of trading and how prices are determined. This is an objective of many regulators, and is a draft IOSCO principle.[120]

310 The description of the nature of the dark pool should include:

(a) how orders interact (e.g. if orders are crossed, is this done on price–time priority, size priority or on some other basis?);

(b) how the price is determined (e.g. the midpoint of the spread on the primary market, volume-weighted average price (VWAP) and time-weighted average price (TWAP));

(c) the access criteria for orders entering the service, as well as whether the service routes orders to other services;

(d) whether the operator's proprietary orders are able to interact with client orders and how the operator ensures that conflicts of interest are appropriately managed; and

(e) where the nature has changed over the previous month, it should be clear what the change was.

311 It will be important for operators of dark pools to manage conflicts of interest, particularly where the pool includes the operator's proprietary orders.

[120] IOSCO Consultation Report, *Issues raised by dark liquidity*, CR05/10, October 2010, p. 29.

I Market integrity measures and regulatory reporting

Key points

We propose that ASIC's surveillance capabilities will be enhanced through:

- provision of suspicious activity notifications; and
- timely access to data, including real-time tagging of short sale trade reporting and origin-of-order information.

312 ASIC is responsible for supervising trading activities and conduct of business by market participants on Australia's domestic licensed markets. Our objective is to preserve market integrity. We propose a number of rules in this section designed to enhance the integrity of Australian markets.

313 Our surveillance needs to keep pace with new trading strategies that become possible as a result of enhancements in trading systems and new execution venues. Challenges will arise for surveillance capacity to cope with the increase in order numbers and speed and for our ability to efficiently monitor the market. There is a need for ASIC to invest in surveillance and data management technology to keep pace with the developments, increased complexity and growth of the market.

Suspicious activity reporting

Proposal

I1 We propose market integrity rules that will require a market participant to notify ASIC (unless the same information has already been reported to the Australian Transaction Reports and Analysis Centre (AUSTRAC)) in a form prescribed by ASIC as soon as practicable if it has reasonable grounds to suspect that a person is:

(a) trading with inside information; or

(b) engaging in manipulative trading.

A market participant must not disclose to other parties that it has notified ASIC of suspicious activity.

Draft Market Integrity Rules I1-1 and I1-2

Your feedback

I1Q1 What are your views on our proposed approach to requiring suspicious activity reporting? Are there other avenues for obtaining this information?

I1Q2	Will compliance with this proposed obligation require any changes to your systems or procedures? What are the likely costs of such changes (where possible, please identify the nature of likely costs, quantify the estimated costs and indicate whether such costs will be one-off or ongoing)? Are there likely to be any significant impediments to making these changes?
I1Q3	Do you have views on whether this proposal is likely to impose any other additional costs or burdens on any class of stakeholder? Where possible, please identify the nature of the likely costs/burdens, quantify the estimated costs (including any assumptions and relevant data) and indicate whether such costs/burdens will be one-off or ongoing. What other information should be encapsulated in suspicious activity reporting?
I1Q4	Are transitional arrangements necessary? What are your views on what the transitional time period and arrangements should be?
I1Q5	Should this obligation apply to trading in non-equity market products (e.g. derivative markets)?

Explanation and rationale

314 Regulators in Germany, the UK and Canada have cited enhanced supervision capabilities through receiving information about suspicious activity and find the reporting very valuable. BaFin[121] states that the 440 analyses of suspected insider trading or market manipulation in 2008 were frequently triggered by information from investors and companies (around 1300). Numerous analyses were based on the 114 suspicious activity reports from banks.[122] An obligation to report a suspected breach of key market integrity rules is critical in protecting the integrity of markets.

315 We believe that suspicious activity reporting will greatly enhance our surveillance functions in an ever-changing market environment by providing information that may initiate a course of inquiry, as well as corroborating information in an existing inquiry.

316 Suspicious activity reporting would not require market participants to form a view on whether a breach has or may have occurred. Market participants are not expected to engage in detailed legal analysis to determine whether a particular law applies to the facts or whether they are aware of the knowledge or intention of the relevant person. However, where there is sufficient reason for a market participant to suspect that prohibited conduct is occurring, the market participant should notify ASIC of the details around this suspicious activity. This may include the market participant's key

[121] BaFin (Bundesanstalt für Finanzdienstleistungsaufsicht) is the federal financial supervisory authority in Germany.
[122] BaFin Annual Report, *Annual report '08*, BaFin, April 2009, www.bafin.de/cln_161/nn_992932/SharedDocs/Downloads/EN/Service/Jahresberichte/2008/annualreport__08__complete,templateId=raw,property=publicationFile.pdf/annualreport_08_complete.pdf.

concerns and specific trading or order book activity for ASIC to review. Participants should have in place arrangements to ensure that employees within the organisation escalate all observed instances of suspicious activity.

317 While s912D of the Corporations Act currently contains a breach reporting obligation, it is limited to a licensee's own breaches, without capturing clients' or other market participants' trading activities. In addition, the existing requirements relate to likely breaches. The proposed new market integrity rule aims to capture the more immediate reporting of matters, where all the elements of a breach may not be known by the market participant.

318 Such notifications will be covered by the qualified privilege protections of s1100A of the Corporations Act.

319 A market participant that notifies ASIC would be expected not to disclose to others that it has done so. This draws on similar requirements overseas, and other laws in Australia.

320 To the extent a market participant has already reported the same information to AUSTRAC, the market participant is not required to notify ASIC. AUSTRAC and ASIC will continue to work together to minimise duplication.

Data to assist ASIC with surveillance

Identification of client and origin of orders

321 Access to a broader range of data will enhance ASIC's capabilities to monitor the market. This will be important in maintaining market confidence. The 6 May 'flash crash' in the US and subsequent challenges experienced by US regulators to replay the events support this view.

322 As the market evolves, data requirements for surveillance have changed. For example:

(a) additional data is required for surveillance as the use of complex trading strategies grows and as order volumes and speeds increase; and

(b) data processing and analysis capabilities will need to be enhanced to process the data into forms meaningful to achieve our objectives.

323 To be able to monitor the market, and conduct investigations and enforcement activity efficiently, we will require timely access to pre-trade and post-trade information in a predetermined format. ASX currently provides a live feed of market data to ASIC for surveillance purposes in the cash equities market. We have identified other types of information that will enhance our role as the market supervisor, discussed in the sections below.

324 Ideally, we would like to have real-time visibility of clients on all orders and trade reports. Market-wide unique client identifiers would strengthen our oversight of markets by enabling us to:

(a) quickly identify persons making trading decisions and to systematically detect misconduct by these persons;

(b) more efficiently assess market trends and the impact of certain types of trading activity on the market; and

(c) in the context of market events like 6 May, respond to parties trading at and around the time of the crash extreme price movements.

325 Regulators overseas are also considering options for market-wide unique client identification.[123] In the US, unique client identifiers would form part of a wider project to deliver a fully consolidated audit trail system. In the UK, it is intended that this would build on the existing firm-wide client identifier that is currently required to be included in transaction reports.[124]

326 Regulators in the US have proposed to implement a large trader reporting system to improve tracking of trading activity in US equity markets.[125] The SEC has proposed this regime to help track HFTs in the market. We consider that this regime would enhance our ability to identify significant market participants, and to collate information on their activity to analyse how their trading behaviour affects the market.

327 We recognise that implementing a market-wide unique client identifier system in Australia will require structural changes to established order management, trading systems, client account opening and back office systems. It would also likely take considerable time and investment by the industry and ASIC, at a time when changes in market structure and the regulatory framework are already demanding expenditure. Therefore, we intend to work with the industry to consider options for delivering such a solution over the medium-term.

328 However, there are a range of interim steps that would greatly enhance our surveillance capabilities and bring Australia more in line with arrangements overseas, while having substantially less impact on market participants (i.e. provision of information that market participants already routinely capture about their clients): see Table 14. A more complete outline of our proposals, including possible data formats is at Appendix 4, Table 23.

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[123] For example, SEC Press Release, *SEC proposes consolidated audit trail system to better track market trades* (2010-86), SEC, 26 May 2010; SEC Press Release, *SEC proposes large trader reporting system* (2010-55), SEC, 14 April 2010; the CSA led a project to develop a Transaction Reporting and Electronic Audit Trail System (TREATS), which we understand has been deferred; CESR Consultation Paper, *CESR technical advice to European Commission in the context of the MiFID Review: Transaction reporting* (CESR/10-292), CESR, 13 April 2010.

[124] FSA, *FSA supervision manual*, Chapter 17, www.fsa.gov.uk/pubs/cp/cp64.pdf.

[125] SEC Press Release, *SEC proposes consolidated audit trail system to better track market trades* (2010-86), SEC, 26 May 2010.

Table 14: Client information

Item	Description
1. Origin-of-order category	The origin of an order could be categorised, such as whether the order is proprietary for the market participant or done as agent or on a facilitation basis. If it is proprietary, information could be provided on whether it is: • on a facilitation basis; • generated from a trade execution algorithm; or • generated from another form of algorithm (e.g. strategy implementation algorithms or stealth/gaming algorithms). If it is done as agent, information could be provided on whether the client is a: • retail investor; • wholesale investor; • sophisticated wholesale investor; or • professional investor. Note: these terms are defined in the Corporations Act.
2. Physical source of order	A market participant could provide the internet protocol (IP) address of the physical device from which the order originated. If the ultimate origin of the order cannot be associated with an IP address, a market participant should provide the last known IP address closest to the origin of the order.
3. DEA clients	For orders and trades originating from a client via DEA, a market participant could provide a participant-wide DEA identifier. An identifier would be allocated by a market participant for each different electronic channel used to receive orders from clients. A channel may be used by multiple clients (e.g. an online broker would allocate an identifier to indicate orders sourced from its website).
4. Algorithms	For orders and trades originating from a market participant's algorithm, the market participant could provide a participant-wide unique identifier for the algorithm.
5. Unique client identifier—participant-wide	Similar to transaction reporting requirements in the UK, we could use existing market participant-wide identifiers (e.g. the market participant's account identifier for each client).
6. Unique client identifier—HIN or SRN	For orders and trades originating from a participant-sponsored retail client, market participants could identify the client's CHESS Holder Identification Number (HIN). For orders and trades originating from an issuer-sponsored retail client, market participants could identify the client's Security Reference Number (SRN) for the traded product. We recognise HINs and SRNs are confidential, which may constrain this option.
7. Large trader identifier	Similar to the US SEC's large trader reporting system proposal, investors/traders whose trading activities equal or exceed certain thresholds (e.g. 1 million shares or $10 million in value per day, or 10 million shares or $100 million per month) (large traders) could identify themselves to ASIC and we would assign a unique large trader identifier. Large traders would then need to identify themselves and the unique identifier to market participants, and market participants would maintain certain additional transaction records for each large trader.

Issue

I2 We propose to establish a phased-in set of requirements about certain data to be included on order and/or trade messages that would be visible only to ASIC and market operators. The first set of requirements will be designed after consultation with industry about what is achievable in a reasonably short period of time.

Your feedback

I2Q1 Will market participants be able to categorise the originator of orders as proposed?

I2Q2 Will market participants be able to identify the IP address associated with the origin of an order?

I2Q3 Will market participants be able to provide an identifier for DEA channels and algorithms?

I2Q4 Will market participants be able to provide a market participant-wide identifier? Is there benefit in providing this as an interim step or would it be preferable to move to a market-wide identifier?

I2Q5 Is it appropriate to use the client's HIN or SRN for this purpose?

I2Q6 What are your views on having a large trader identifier? What should the thresholds be?

I2Q7 Should the information be provided in specific 'ASIC only' fields on orders and trade reports or are there existing fields that could be used?

I2Q8 What other additional types of data do you consider should be made available to ASIC to perform our function as a market supervisor?

I2Q9 Considering the additional data to be captured in order and trade reports, what will be the impact on the performance and capacity of your order management and trading systems?

I2Q10 What lead time would be required for each item in Table 14?

I2Q11 Should we consider the options in relation to trading in non-equity market products (e.g. derivative markets)?

Explanation and rationale

329 We are interested in feedback on what would be involved in reporting each of the items in Table 14. We expect that items 1–4 in Table 14 would be relatively straightforward for market participants to capture and include in pre-trade and post-trade information (to be disclosed to ASIC and market operators only). Items 5–7 may be more challenging and therefore it may be appropriate to consider them as part of a longer term client identifier piece of work.

330 The discipline of categorising the origin of orders will also assist a market participant's compliance and risk management frameworks.

331 Origin-of-order information allows regulators to detect and investigate market manipulation and insider trading with greater efficiency and may assist market participants' risk management. Unique market-wide client identifiers are already used in some jurisdictions to identify the origin of orders and are proposed for implementation in a number of others.

332 In Australia there is no existing requirement to provide participant-wide or market-wide order origin information. There is no requirement to disclose a client's identity to the market operator or to ASIC in real time. However, market participants must keep transactional records that include the identification of the client for a period of seven years as part of their AFS licence obligation under s988A of the Corporations Act.

333 ASIC also has the power to issue notices to produce information, requiring market participants to disclose the identification of their clients. This power is often used for insider trading and market manipulation investigations.

334 We consider that the availability of origin-of-order information will enhance our capability to perform market surveillance.

335 Under consideration is the introduction of new 'ASIC/market operator only' data fields to categorise the source of orders. Where possible, 'ASIC/market operator only' data fields should identify the specific client or algorithm that initiated the order.

336 We recognise that changes to market participants' order management and trading systems are time-consuming and costly. We anticipate that changes to these systems will be necessary to accommodate multiple execution venues and recognise the opportunity to implement changes that will improve our surveillance capability.

337 To minimise the impact on market participants and other stakeholders, and to preserve confidentiality of client details, order-origin data required by ASIC should be provided in new 'ASIC only' data fields on orders and trade reports.

338 We recognise that changes to order and trade message protocols will require broad consultation with brokers, order management and trading system providers, and organisations responsible for establishment of messaging standards.

Identification of off-order book execution venues: Dark pools

Proposal

I3 We propose a market integrity rule that will require a market participant, when transacting off-order book, to identify on post-trade transparency disclosures (trade reports) the execution venue. This information would be visible only to ASIC and market operators: see Appendix 4.

Draft Market Integrity Rule I3

Your feedback

I3Q1 What are your views on this proposal?

I3Q2 Is it possible to make this information available to ASIC on a trade-by-trade basis?

I3Q3 Will compliance with this proposed obligation require any changes to your systems or procedures? What are the likely costs of such changes (where possible, please identify the nature of likely costs, quantify the estimated costs and indicate whether such costs will be one-off or ongoing)? Are there likely to be any significant impediments to making these changes?

I3Q4 Do you have views on whether this proposal is likely to impose any other additional costs or burdens on any class of stakeholder? Where possible, please identify the nature of the likely costs/burdens, quantify the estimated costs (including any assumptions and relevant data) and indicate whether such costs/burdens will be one-off or ongoing.

Explanation and rationale

339 To stay abreast of developments in market structure, including the depth of liquidity within dark pools, we believe there would be value in introducing a new 'ASIC only' field to identify the execution venue for trades executed off-order book (e.g. an identifier for crossing systems that is unique from any identifier used for the relevant market participant). This will enhance the efficiency and efficacy of our surveillance function.

340 In Europe, CESR is also considering whether to require crossing systems to identify themselves on trade reports.[126]

Identification of short sales

Proposal

I4 We propose market integrity rules that will require a market participant to distinguish short sale orders and trade reports where the sell-side is a short sale. A market participant must specify the quantity of the sale

[126] CESR Consultation Paper, *CESR technical advice to European Commission in the context of the MiFID Review: Transaction reporting* (CESR/10-292), CESR, 13 April 2010.

that is short, to ASIC and the market operator, at the time the sale order is placed or the time the trade is reported.

This proposal applies to s1020B products in the Corporations Act.

It is proposed that the current exemptions to transactional reporting will continue to apply so that the short sales made under these exemptions will not be required to be tagged under this proposal. Refer to Regulatory Guide 196 *Short selling* (RG 196) at RG 196.42–RG 196.79 for more information on the short sale transactions that require disclosure.

No manual adjustments or splitting of orders are expected to be required.

Draft Market Integrity Rules I4-1 and I4-2

Your feedback

I4Q1	What are your views on this proposal?
I4Q2	Will compliance with this proposed obligation require any changes to your systems or procedures? What are the likely costs of such changes (where possible, please identify the nature of likely costs, quantify the estimated costs and indicate whether such costs will be one-off or ongoing)? Are there likely to be any significant impediments to making these changes?
I4Q3	Do you have views on whether this proposal is likely to impose any other additional costs or burdens on any class of stakeholder? Where possible, please identify the nature of the likely costs/burdens, quantify the estimated costs (including any assumptions and relevant data) and indicate whether such costs/burdens will be one-off or ongoing.
I4Q4	Are there any other practical implications?
I4Q5	What are the likely risks of this proposal on your business?
I4Q6	We do not expect that any manual adjustments or splitting of orders will be required. Do you agree?
I4Q7	Are transitional arrangements necessary? What are your views on what the transitional time period and arrangements should be?

Explanation and rationale

341 Short selling disclosure requirements currently place an obligation on a seller (or brokers acting on the seller's behalf) to report short sale transactions in the market to the market operator. This includes covered short sales made on a licensed market and certain naked short sales that are exempt from the prohibitions.[127] For more information, see RG 196.

[127] Div 5B of Pt 7.9 of the Corporations Act and Div 15 of Pt 7.9 of the Corporations Regulations.

342 The disclosure and reporting arrangements provide additional transparency on the amount of short selling in Australian securities to participants in financial markets, ASIC and the market operator. ASIC uses this data together with information about trading and market positions in traded securities to assist in detecting market manipulation and other non-compliance with existing obligations.

343 In practice, market participants report all short sales to ASX at the end of each business day. ASX produces and disseminates a report to the market on the next trading day, showing, by security, the total volume of short sales executed on the previous trading day.

344 ASIC Media Release (08-211MR) *Requirements for disclosure and reporting of short sales from 19 November 2008* foreshadowed requiring AFS licensees to make use of real-time tagging infrastructure made available by market operators to meet trade reporting obligations and to be able to dispense with the end of day reports to ASX. In 2009 we sought feedback from several parts of the industry about a proposed framework for real-time tagging of short sale trades. Given the technical enhancements likely to be required by market participants to conduct real-time tagging, we considered introducing this requirement to coincide with other technical changes that the market may need to make as part of the current consultation process. The proposal for the quantity of the short sale that is short to be specified is intended to address many of the concerns raised in the 2009 feedback in relation to manual adjustments and splitting of orders. This will also enhance the accuracy of the information that is provided to the public about short sale activity in the market.

345 Real-time tagging of short sales executed in the market will enhance transparency of the volumes of short selling activity to the market operator and ASIC, allowing market surveillance to identify aggressive and potentially predatory trading in real time. This is consistent with IOSCO's second principle on the regulation of short selling—that 'short selling should be subject to a reporting regime that provides timely information to the market or to market authorities'.[128]

346 Jurisdictions such as Canada, Hong Kong, Japan and the US require the tagging of short sales when orders are submitted to the exchange markets for execution. The European Commission indicated in September 2010 its intention to introduce real-time tagging of short sale transactions. In Australia, it is proposed that these tags will be visible only to ASIC and the market operator. ASX will continue to publicly disclose information about short sale activity in the market as it does currently.

[128] IOSCO Report, *Regulation of short selling* (IOSCOPD292), Technical Committee of IOSCO, June 2009.

347 Industry is expected to benefit from the automation of gross reporting to the market operator, assisting industry in meeting its existing obligations.

Implications for market operators

348 A market operator will need to ensure that technical specifications for short sale tagging are available to its market participants.

Implications for market participants

349 A market participant will be required to upgrade its order management systems and trading systems to ensure that it has the capability to tag orders at the time the sale order is placed.

350 Before placing an order on behalf of a client, a market participant will need to be satisfied that it is aware of whether the client has indicated that their trade is a short sale and whether the trade is a short sale that must be tagged. This will be important whether the order is placed through an adviser or a DEA system.

351 If a market participant is aware that an order is a short sale trade, it will need to ensure that the order is tagged correctly. A market participant is expected to educate itself and its employees about which trades must be tagged.

Implications for short sellers

352 Short sellers are already required to notify their broker that their trade is a short sale. Short sellers who do not place orders via a broker will continue to be required to ensure that their trade is correctly tagged as a short sale.

353 This proposal automates the reporting process under the existing short sale trade reporting regime. The obligation and scope of application is not expected to be altered; however, the method of reporting will change.

PART 3: RESPONSE TO COMPETING EXCHANGE MARKETS IN AUSTRALIA

Part 3 outlines proposals to address the additional regulatory issues that arise in an environment with multiple exchange markets offering trading services in the same products. These regulatory issues are over and above those outlined in Part 2.

The proposals in Part 3 address the following issues:

- *post-trade transparency*—to ensure consistent information is available to contribute to price formation and to evidence execution performance (see Section J);
- *consolidation of pre-trade and post-trade information*—irrespective of where the information is generated (see Section K);
- *market operators: other obligations*—coordination between market operators to ensure trading halts and other events are managed consistently (see Section L); and
- *market participants: other obligations*—to maintain market integrity (see Section M).

J Post-trade transparency

Key points

We propose that details of executed trades should be made public immediately, with the exception of certain large facilitated trades.

We propose that the content of the disclosure is broadly similar to existing requirements on ASX.

Off-order book trades must be reported to a market operator.

We propose that passing of orders, primary market transactions and stock lending do not need to be disclosed.

354 Access to timely market information is imperative to enable market participants to find liquidity and to fulfil their best execution obligation. As discussed in Section H, pre-trade and post-trade transparency are generally regarded as central to both the fairness and efficiency of a market, and in particular to its liquidity and quality of price formation.

355 We consider it necessary to address some of our concerns about pre-trade transparency irrespective of whether there are competing market operators. As such, our proposals relating to pre-trade transparency are discussed earlier in Section H. Our post-trade transparency proposals relate to the need for harmonisation if there are competing market operators. Post-trade transparency is discussed in this section.

356 An environment with competing market operators also introduces a need to consolidate pre-trade and post-trade information from all markets, to ensure investors have a complete view of pricing. Data consolidation is discussed in Section K.

357 Disclosure of volumes and prices about completed trades (post-trade transparency), like pre-trade transparency, contributes to price formation. But, importantly, it is an input to enable investors to assess execution quality and is an important component for transaction cost analysis.

358 There are some circumstances where immediate disclosure of executed trades can have negative market impacts, particularly where the transaction relates to only one element of a larger portfolio trade or where the market participant executed the transaction as principal and needs to off-load the position it acquired. The proposals include an exception where a publication delay is permitted. This is the rationale for ASX's facilitated specified size block special crossings rule.

359 It is important that post-trade transparency arrangements be harmonised across markets to prevent the possibility of regulatory arbitrage.

360 Further discussion of the role of transparency in the efficient functioning of markets is in REP 215, paragraphs 208–247.

Timing of publication

Proposal

J1 We propose a market integrity rule requiring a market operator offering trading in equity market products to make public:

(a) certain information about transactions executed under its rules and during normal trading hours immediately, subject to the deferral exceptions described below. The information displayed should be complete, accurate and up-to-date. We intend to specify the detail about who to publish the information to once we have taken into account the feedback from this consultation paper and after further consultation with market operators; and

(b) all information reported to it outside normal trading hours before the market opens.

Draft Market Integrity Rule J1-1

Your feedback

J1Q1 Will compliance with this proposed obligation require any changes to your systems or procedures? What are the likely costs of such changes (where possible, please identify the nature of likely costs, quantify the estimated costs and indicate whether such costs will be one-off or ongoing)? Are there likely to be any significant impediments to making these changes?

J1Q2 Do you have views on whether this proposal is likely to impose any other additional costs or burdens on any class of stakeholder? Where possible, please identify the nature of the likely costs/burdens, quantify the estimated costs (including any assumptions and relevant data) and indicate whether such costs/burdens will be one-off or ongoing.

J2 We propose a market integrity rule requiring a market participant that transacts off-order book:

(a) *during normal trading hours*—to report post-trade information immediately to a market operator; and

(b) *outside normal trading hours*—irrespective of where they are executed, to report post-trade information to a relevant market operator at least by 15 minutes prior to the commencement of normal trading hours of the next trading day based on the earliest opening hour of any exchange market.

Reporting of facilitated principal transactions that are large in size may be deferred, as follows:

(a) $15 million for equity market products in Category A;

(b) $10 million for equity market products in Category B;

(c) $5 million for equity market products in Category C; and

(d) $2 million for all other equity market products (Category D).[129]

Where a market participant buys or sells more than one class of equity market product under a single agreement, each constituent trade should be assessed separately for the purpose of determining whether it is entitled to deferred publication.

The maximum period for deferral is:

(a) 15 minutes prior to the commencement of normal trading hours on the next trading day based on the earliest opening hour of any exchange market if the trade is effected before 1 pm on the previous trading day; or

(b) no later than 1 pm on the next trading day if the trade is effected after 1 pm on the previous trading day.

However, entities should publish as soon as they are no longer at risk.

Draft Market Integrity Rule J2-1

Your feedback

J2Q1 What will be the impact of requiring transactions done outside normal trading hours to be reported before any market opens?

J2Q2 Is it appropriate that off-order book trade reporting is limited to market participants or should it apply to all AFS licensees?

J2Q3 Are the existing categories for block exceptions still appropriate? If not, why not? What is the impact of the delays on transparency?

J2Q4 The thresholds for block trades will need to keep pace with market developments. What should be the process for modifying the thresholds?

J2Q5 Should post-trade data be provided free of charge after a short period? What should that period be?

J2Q6 Will compliance with this proposed obligation require any changes to your systems or procedures? What are the likely costs of such changes (where possible, please identify the nature of likely costs, quantify the estimated costs and indicate whether such costs will be one-off or ongoing)? Are there likely to be any significant impediments to making these changes?

[129] As at 12 October 2010, **Category A:** no shares at this point in time, **Category B:** BHP, TLS, **Category C**:AGK, AIO, AMC, AMP, ANZ, ASX, AWC, AXA, CBA, CCL, CFX, CPU, CSL, EQN, FGL, FMG, GPT, IAG, IPL, LEI, MAP, MBN, MGR, MQG, NAB, NCM, NWS, ORG, ORI, OSH, OZL, QAN, QBE, RIO, RMD, SGP, SHL, STO, SUN, TAH, TCL, TOL, WBC, WDC, WES, WOR, WOW, WPL **Category D:** all other shares.

J2Q7 Do you have views on whether this proposal is likely to impose any other additional costs or burdens on any class of stakeholder? Where possible, please identify the nature of the likely costs/burdens, quantify the estimated costs (including any assumptions and relevant data) and indicate whether such costs/burdens will be one-off or ongoing.

Explanation and rationale

361 In a competitive market environment, it will no longer be possible for ASX (or any other market operator) to force off-order book trading done by market participants to be deemed to have been done under the rules of the market operator (ASX Operating Rule Procedure 3500). It needs to be possible for market participants of ASX to transact on new markets without being required to report to ASX.

362 ASX makes information about transactions executed on its market public immediately and requires that its market participants that trade off-order book also report immediately, and at least within 30 seconds. Market participants are entitled to a delay for facilitated specified size block special crossings (i.e. for transactions above $15 million, $10 million, $5 million or $2 million, depending on the product). In these circumstances, there is a delay until prior to the opening on the next day for trades done before 1 pm, and before 1 pm the next day for trades done after 1 pm.[130]

363 We are proposing to retain the existing obligation for immediate post-trade disclosure subject to the existing facilitated delays and thresholds. The categories will be the existing ASX categories. We will periodically review the products that fall within each category and make the information publicly available.

364 We encourage market participants to only avail themselves of the delay while they are at risk. When they are no longer at risk they should publish. However, when dealing off-order book, market participants will have choice as to which market operator to report.

365 As discussed in Section M, we intend to require that all transactions by market participants be done under the rules of a licensed market. This will ensure that all relevant transactions will be reported to a licensed market, limiting the sources of post-trade information to be consolidated.

366 In relation to transactions that take place outside normal trading hours, irrespective of where they are executed, they should be reported to a licensed market at least by 15 minutes prior to the commencement of normal trading hours. Where operating hours vary between markets, we deem 'normal trading hours' to be the earliest opening time and latest closing time of all

[130] ASX Operating Rule 4810 facilitated specified size block special crossing and 4810 portfolios.

licensed markets dealing in equity market products. We will communicate the relevant hours to the industry from time to time.

Content of post-trade disclosures

Proposal

J3 We propose a market integrity rule that will prescribe the minimum information that a market participant must report to a market operator and that the market operator must make public in accordance with proposals J1 and J2. The proposed information requirements are outlined in Appendix 4, Table 22.

Draft Market Integrity Rule J3

Your feedback

J3Q1 Should crossing systems be uniquely identified on post-trade publications, to assist market participants and investors to locate liquidity?[131]

J3Q2 Is there value in publicly disclosing whether a trade was done on an agency or principal basis?

J3Q3 Is there value in publicly disclosing whether a trade was generated by a dark order?

J3Q4 Is there value in publicly disclosing whether at least one side of a trade was generated by an algorithm?

J3Q5 Should data fields and standards be harmonised to simplify the data consolidation process? Are the proposed field formats appropriate?

J3Q6 Do you already prepare and report post-trade information? If so, will any changes to the minimum content of post-trade disclosures require changes to your systems or procedures? What are the likely costs of such changes (where possible, please identify the nature of likely costs, quantify the estimated costs and indicate whether such costs will be one-off or ongoing)? Are there likely to be any significant impediments to making these changes?

J3Q7 Do you have views on whether this proposal is likely to impose any other additional costs or burdens on any class of stakeholder? Where possible, please identify the nature of the likely costs/burdens, quantify the estimated costs (including any assumptions and relevant data) and indicate whether such costs/burdens will be one-off or ongoing.

[131] European regulators have recommended a similar requirement: see CESR Technical Advice, *CESR technical advice to European Commission in the context of the MiFID Review: Equity markets* (CESR/10-802), CESR, 29 July 2010.

Explanation and rationale

367 Harmonisation of data fields across all venues will facilitate the data consolidation process. Lack of harmonisation of data standards in Europe has been identified as a significant barrier to consolidation. CESR has recently consulted on harmonising a number of data fields.[132]

368 Broadly, we propose that the same content be published as is today (e.g. price, size, product code, condition codes) with the time stamp for off-order book trades reflecting the time of execution.

369 Transactions by market participants in equity market products that take place off-order book must be reported to a market operator—irrespective of where the counterparty is located (i.e. including if the counterparty is overseas).

Reporting of off-order book transactions

Proposal

J4 We propose a market integrity rule on market participants that will require only one party to a transaction to report the information. This party should be the executing party. When there is no clear executing party, it should be the seller or by agreement between the parties. When only one party is subject to the market integrity rules, that party must report.

Two matching trades entered at the same time and price with a single party interposed (i.e. riskless principal) is a single transaction for the purpose of the post-trade transparency obligations. Parties to a transaction must ensure that the transaction is made public as a single transaction.

Draft Market Integrity Rule J4

Your feedback

J4Q1 Is it appropriate that the executing party be responsible for reporting of off-order book post-trade information, with the sellers as the default?

J4Q2 Will compliance with this proposed obligation require any changes to your systems or procedures? What are the likely costs of such changes (where possible, please identify the nature of likely costs, quantify the estimated costs and indicate whether such costs will be one-off or ongoing)? Are there likely to be any significant impediments to making these changes?

[132] CESR Technical Advice, *CESR Technical Advice to the European Commission in the Context of the MiFID review: Equity markets* (10-882), CESR, October 2010

J4Q3 Do you have views on whether this proposal is likely to impose any other additional costs or burdens on any class of stakeholder? Where possible, please identify the nature of the likely costs/burdens, quantify the estimated costs (including any assumptions and relevant data) and indicate whether such costs/burdens will be one-off or ongoing.

Explanation and rationale

370 We considered the approaches to off-book reporting in Europe and the US:

(a) under MiFID in Europe the responsibility for reporting is left to counterparties to agree. Where there is no agreement, the default is the seller;[133] and

(b) FINRA in the US places the obligation on the executing party and, where there is not a clear executing party, it should be the seller.[134]

371 Our proposal reflects FINRA's approach. Only one party to a transaction should report the information. This party should be:

(a) the executing party (e.g. a market participant that executes a trade through its crossing system);

(b) where there is not a clear executing party, it should be the seller (e.g. manually negotiated trades);

(c) where only one party is subject to the market integrity rules, the party subject to the rules must report (e.g. if the counterparty is an overseas party, the Australian party must report); or

(d) determined by agreement between the parties. In this case, the party representing the sell-side must document the agreement reached with the buy-side that the buy-side will report. This can be done on a case-by-case basis or as a standing agreement between the parties.

372 All parties to a transaction must ensure it is clear who will do the reporting. However, we acknowledge the non-reporting party is not responsible for publication irrespective of whether the reporting party complies with its reporting obligation.

373 The basis for this proposal is that executing parties are likely to have the systems and connections to report.

[133] Section 4 in Article 27 of the Commission Regulation (EC) No. 1287/2006, 10 August 2006, http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2006:241:0001:0025:EN:PDF.
[134] FINRA Regulatory Notice, *Trade reporting: SEC approves amendments to FINRA trade reporting rule* (09-08), FINRA, January 2009.

Examples of reporting obligations

Market: A market participant receives a buy order from Client B for 5000 products. The market participant, on the basis of its best execution policy, routes the order to Market X for execution. Market X must publish a transaction of 5000 products.

Agency: A market participant receives a buy order from Client B and a sell order from Client C—both for 5000 products. The market participant, as agent, matches the orders of Client B and Client C. As the executing party, it must report a transaction of 5000 products.

Principal: A market participant receives a buy order from Client B for 5000 products. The market participant executes the trade against its own account. As the executing party, it must report a transaction of 5000 products.

Riskless principal: A market participant receives a buy order from Client B and a sell order from Client C for 5000 products. The market participant simultaneously acts as the seller to Client B and buyer to Client C. As the executing party, it must report a single transaction of 5000 products.

Multi-fill (agency): A market participant receives a buy order from Client B for 5000 products and a sell order from Client C for 8000 products. The market participant, as agent, matches the order of Client B with 5000 of Client C's order. The remaining 3000 products from Client C are sold on Market X. The market participant, as the executing party for the agency component, must report a transaction of 5000 products. Market X must publish a transaction of 3000 products.

Negotiated: Market participant A wants to buy 5000 products and Market participant B wants to sell 5000 products. They manually negotiate a price. Market participant B, as the seller, must report a trade of 5000 products.

Principal hedge: A market participant receives a buy order from Client B for 5000 products. The market participant executes the trade against its own account, and then hedges its position on Market X. The market participant, as the executing party for the client transaction, must report a transaction of 5000 products. Market X must publish a transaction of 5000 products.

Activities that do not need to be reported

Proposal

J5 We propose a market integrity rule clarifying that the following activities should not be post-trade reported:

(a) passing of an order;

(b) primary market transactions; and

(c) stock lending or stock borrowing.

Draft Market Integrity Rule J5

Your feedback

J5Q1 Are there any other activities that should not be reported?

Explanation and rationale

374 It will be important to ensure that only those activities that constitute a transaction are reported and that certain transactions are not reported more than once. This is necessary to avoid duplication and misleading the wider market about the volume of trading. In this regard, we propose to place an active obligation on parties to a transaction to ensure that the transaction is made public as a single transaction and only reported once.

375 The following activities should not be reported:

(a) passing of an order—it only becomes a transaction at the point there is an execution. For example, when an order passes from one investor to another via a chain of firms, and when the movement is economically unchanged, only the final execution constitutes a transaction;

(b) primary market transactions (such as issuance allotment, subscription or takeover bid); and

(c) stock lending or stock borrowing.

376 Two matching trades entered at the same time and price with a single party interposed should be reported as a single trade to avoid duplication.

K Consolidation of pre-trade and post-trade information

Key points

Consolidated market data is fundamental for efficient price formation. We are considering three options to consolidate data from all venues, although the following two options are preferred:

- a single provider established by tender process; and
- competing providers approved by ASIC.

377 There is a risk that fragmentation of trading data across markets may hinder price formation if a consolidated view of pricing is not easily available. This is because investors may not see all of the information that is relevant to make an informed investment decision, and price discrepancies between markets might last longer than they otherwise would. This may result in some investors trading at a less advantageous price because they do not have access to full price information. Fragmented information may also impact the ability of companies to keep track of trading activity in their stock.

378 We consider that a consolidated source of trade information that is available for a reasonable price to all users is a valuable public good, and a fundamental element of a fair, orderly and transparent market.

379 A consolidated view of pre-trade and post-trade information would:

(a) be a price formation vehicle for traders not reliant on speed;

(b) facilitate best execution monitoring and evidencing;

(c) facilitate data integrity checks;

(d) facilitate transaction cost analysis;

(e) be used for surveillance purposes by ASIC; and

(f) be a source for listed companies to monitor trading activity in their stocks.

380 At present, a consolidated view of order and trade information for equity market products is available in Australia via the following means:

(a) ASX requires orders to be displayed on the order book unless they fall within one of its crossing exemptions (e.g. block special crossing where trades above $1 million can be crossed by a market participant and not displayed on the order book or meet the size requirement to allow the volume of the order to remain undisclosed).

(b) Details of executed trades must be reported to ASX immediately, unless the trades are above certain thresholds and have been facilitated by a market participant. Off-order book trading must be reported to ASX.

(c) ASX sells a real-time consolidated view of bids and offers, as well as a consolidated view of executed trades. This information is available for free with a delay of at least 20 minutes. Market participants can also purchase data on commercial terms indirectly through one of several competing data vendors.

381 To ensure the benefits of a consolidated view are retained in a fragmented market, it is important that a full, accurate, robust and reliable consolidated view of whole-of-market order and trade information continues to be available from the commencement of competition in trading services.

382 In the absence of a consolidated view of pre-trade and post-trade information, we expect market participants and data vendors to consolidate data sourced directly from market operators to create their own interpretations of a consolidated view of orders and trades.

383 Internationally, the issue of consolidating pre-trade and post-trade information in a fragmented market has been approached in different ways, and outcomes have differed. The US has mandated consolidated pre-trade and post-trade tapes. Other jurisdictions that introduced competition without a consolidated tape (e.g. Canada and Europe) are now moving to a mandated tape.

384 We will engage with the ACCC on the consolidated tape as we finalise our policy.

385 Further discussion of the need for consolidated market data is in REP 215, paragraphs 248–252.

Options to deliver consolidated information

386 We consider there are three possible ways in which a framework resulting in consolidated information could be delivered, with a preference for two of these options. The three possible options are:

(a) multiple providers approved by ASIC establish consolidated views of pre-trade and post-trade information;

(b) a single provider provides a consolidated view of pre-trade and post-trade information established by ASIC tender process; and

(c) a Government or industry utility provides a consolidated view of pre-trade and post-trade information.

387 We consider that regulatory intervention is beneficial and are considering whether a solution should be provided by one or multiple providers. There are a number of factors which are relevant to this consideration: see Table 15.

Table 15: Factors relevant in considering data consolidation options

Factor	Comment
The nature of the Australian market	Unlike the European and US markets, there is unlikely to be significant fragmentation of trading of equity market products in the short to medium term. Trading is likely to occur on a small number of venues in addition to trading that already occurs off-order book (e.g. an ASX off-market crossing).
Data	At a minimum, we consider the top five bids and offers per product and all post-trade information should be contained in the consolidated view of information—consistent with practice overseas. The consolidated tape provider should provide full order book depth and all post-trade information to ASIC for its surveillance purposes.
Transparency obligations which may be imposed on market operators and market participants	We consider that market operators should report full order book depth and all post-trade information to the consolidated tape provider. We consider that this information should be provided to consolidated tape provider/s either at no cost or at a reasonable price. If there is more than one consolidated tape provider, market operators should ensure that they provide equal access to that information. We consider that trading that takes place on an execution venue not operated by a market operator should continue to be reported to a market operator, and included in the market operator's feed of information. This trading could be reported to any market operator that provides facilities for trading equity market products.
Quality of data	It is important to ensure there is clarity about where the responsibility lies for reporting pre-trade and post-trade information and what reporting is required (i.e. standardised format and timeliness). We consider that market operators will have an obligation to ensure that the data they provide to a consolidated tape provider is accurate, reliable and high quality.
Existing providers of data services	International experience has been that commercial vendors provide their own consolidated feed of all or a segment of the market, irrespective of whether there is an official consolidated tape. They do this for commercial reasons (e.g. can be faster and offer value-added services). In Australia, IRESS Market Technology Limited (IRESS) is the main data vendor. However, ASX is currently the original supplier of data. ASX currently has an 18.8% investment in IRESS.[135] Other data vendors also exist in Australia. We consider it likely that IRESS, Bloomberg, Reuters and other vendors would process direct feeds from each of the markets and prepare a consolidated view of pre-trade and post-trade information covering most execution venues.

[135] ASX Annual Report, *Annual Report 2010*, ASX Limited, 19 August 2010, p. 113, www.asx.com.au/about/pdf/asx_annual_report_2010.pdf.

Factor	Comment
Time	In today's fast market, the real-time value of data dissipates very quickly. Accordingly, we are of the view that data should be free to all users after a short time (e.g. 15 minutes). With respect to latency of information, we consider that market operators should provide information to the consolidated tape provider/s and other data users using direct licensee feeds on an equivalent basis.
Needs of different users	It is anticipated that some market participants will become reliant on the consolidated tape for making commercial order execution decisions and also in fulfilment of their regulatory obligations. Other market participants and traders (e.g. HFTs) will continue to acquire direct feeds of order information from each market operator for trading decisions, as this will allow them to trade more quickly than if they rely on the consolidated tape. However, we note that these market participants may still use the consolidated tape provider for data integrity checks. Users may also need different information. For example, a consolidated view of top-of-the-book data may be adequate for some users, whereas others need the full depth-of-book data. We intend to use a consolidated tape provider for our surveillance purposes because it is desirable to use the same set of data as the industry for surveillance activity.
Connectivity and access to data	Data vendors would need to receive, process and store order/trade data feeds from multiple markets. Under some options, market operators would provide information to more than one consolidated data provider, which may impose some additional costs in terms of connectivity on market operators. Market operators should provide trade information to all users on a non-discriminatory and equivalent basis. We intend to set minimum standards ensuring that providers use common data formats which permit commercially viable usage. We also intend to set technical standards and protocols that would govern the provider's technical connection to ASIC's Integrated Market Supervision System (IMSS) for the provision of information for surveillance.
Competition	Multiple providers are likely to compete on price, technology (including ways to address latency issues) and additional value-added services.
Minimum operating standards	We consider that data consolidators should adhere to minimum operating standards which govern the consolidator's function and operation in the market to ensure, among other things, completeness and quality of information and robustness and reliance of service. These standards are summarised in Appendix 5.
Pricing	All pricing should be reasonable and non-discriminatory. The obligation of market operators to provide information at reasonable cost or at no cost, and on reasonable terms, would only relate to information provided to ASIC-approved consolidated tape providers in their capacity providing the top five bids and offers per product and all post-trade information. Market operators may negotiate different agreements to provide data for other uses. Consolidated tape providers should provide the top five bids and offers per product and all post-trade information on an unbundled basis. However, they could offer additional services separately.

388 Taking into account the factors in Table 15, we have considered three options; however, we prefer the first two of these options. Table 16 summarises the three options, with a discussion of each option following.

Table 16: Comparison of consolidated tape options

	Option 1	Option 2	Option 3
Number of consolidators	Multiple	Single	Single
Market operator connections required	Multiple	Single	Single
Form of establishment	ASIC approval	ASIC tender	Utility
Form of oversight	Standards	Standards	Utility constitution
Level of oversight	High	High	High
Competitive pressure	High	High	Low
Incentive for innovation	High	High	Low
Evidencing best execution	Nominate approved tape	From sole tape	From sole tape
Provision of information to tape	No charge or reasonable terms	No charge or reasonable terms	No charge or reasonable terms
Pricing model	Commercially based	Cost pass-through	Not-for-profit

Option 1: Multiple providers approved by ASIC to establish consolidated views of pre-trade and post-trade information

389 Under this option market forces could deliver a solution; however, we propose that:

(a) market operators could only meet their transparency obligations by reporting information to an ASIC-approved consolidator; and

(b) an entity wishing to provide an ASIC-approved consolidated view of pre-trade and post-trade information would seek approval from ASIC to provide services as an ASIC-approved data consolidator. See Appendix 5 for ASIC's proposed minimum standards for an ASIC-approved data consolidator.

390 The benefits of this option are that:

(a) it would allow the market to create a solution for users in a competitive manner;

(b) providers are likely to offer services which meet user needs; and

(c) there is likely to be an element of competition in innovation and technology to address latency issues and offer additional services to attract users.

391 The approved entities would operate consolidated data publication arrangements to minimum operating standards set by ASIC. As part of its initial application, the applicant would need to demonstrate that it has the processes in place to meet these minimum operating standards on an ongoing basis. These minimum operating standards would contemplate that market operators should provide the full depth of order book and all post-trade information to all ASIC-approved consolidators at either no charge, or at a reasonable price, and provide equal access to that information. Under this option, users could take comfort that the ASIC-approved consolidators meet minimum operating standards set by ASIC.

392 This solution may yield slightly different consolidated results; the tapes are unlikely to be identical. The ASIC-approved consolidator services would be used in the ways listed in Table 17.

Table 17: Uses of consolidated tapes under Option 1

Use	Description
Best execution	As part of our assessment of compliance with best execution obligations, we would only rely on a tape prepared by an ASIC-approved consolidator.
Referencing orders	The ASIC-approved consolidator's views of pre-trade transparency could be used to reference orders against; however, we consider that it should be clear and transparent as to which ASIC-approved consolidator is the reference point.
ASIC surveillance	We may use one of the ASIC-approved consolidator's services for surveillance purposes.

393 This option would allow a market-led solution; however, the added level of regulatory oversight from ASIC is likely to give investors additional confidence in the accuracy of information and operating standards and reliability of the providers.

Option 2: Single provider of consolidated view of pre-trade and post-trade information established by ASIC tender process

394 Under this option, ASIC would appoint a single consolidated tape provider by issuing an open tender. The consolidator would be appointed for a fixed period (e.g. 5 years) and be tasked with collecting, validating, aggregating

and publishing in real-time the information that market operators must report to meet their pre-trade and post-trade transparency obligations.

395 We would set minimum operating standards and impose those standards on the consolidator to mitigate the impact of:

(a) potential reduced competition—we would place an obligation on the consolidator to keep pace with innovation; and

(b) reliance by the whole of market on a single consolidator—we would place an obligation on the consolidator to ensure that a robust, reliable, fair and transparent service is provided to the market without disruption.

396 As part of the tender process, the consolidator should demonstrate that it has processes in place to meet the minimum operating standards set by ASIC on an ongoing basis. The operator should review its consolidated tape services in consultation with ASIC at least annually, and operate its consolidated tape service on a cost pass-through basis with some allowance for demonstrated innovation. A Governance Committee (containing independent members) should be in place to monitor compliance with the minimum ASIC operating standards and to advise on pricing. The minimum operating standards should be conditions of the ASIC tender. A summary of the minimum operating standards is contained in Appendix 5.

397 We consider it likely that other consolidators will compete with the single provider by offering full depth of book, faster linkages and added services. This competition should also apply pressure to the single consolidator to keep pace with technological innovation.

398 The approved single consolidator's services would be used in the ways listed in Table 18.

Table 18: Uses of a consolidated tape under Option 2

Use	Description
Best execution	As part of our assessment of compliance with best execution obligations, we would only rely on the tape prepared by the single consolidator established by the ASIC tender process.
Referencing orders	The consolidated view of pre-trade transparency could be used to reference orders against; however, it should be clear and transparent that the single consolidator is the reference point.
ASIC surveillance	We may use the single consolidator's service for surveillance purposes.

Option 3: Government or industry utility provides a consolidated view of pre-trade and post-trade information

399 Under this option, we would work with industry to create a utility provider which operates on a not-for-profit basis to create a consolidated view of pre-trade and post-trade information, which performs the functions described in Option 2.

400 ASIC and the industry as a whole would determine and have ongoing input into the standards of providing the data, including ensuring the data is of adequate quality, the service is robust and the consolidated information is provided on fair and transparent terms. The minimum operating standards would form part of the constitution of the utility.

401 Embedding the monopoly provision of consolidated data within a single utility may be detrimental to the market because of constraints on that organisation's incentive to innovate.

402 We are also mindful that a number of providers of data services already exist in the Australian market, and that those providers have already indicated they intend to process direct feeds from each of the markets and prepare their own consolidated data. We are of the view that government intervention to provide a service that is likely to be provided by the market regardless is not an ideal outcome.

Issue

K1 We are intending to bring about an outcome of a whole-of-market complete and accurate consolidated view of pre-trade and post-trade information for equity market products.

We have discussed three possible options which may achieve this outcome. However, we are of the view that, on balance, only two of these options are preferable in the context of the likely structure of the Australian market and the outcomes we are trying to achieve:

(a) multiple ASIC-approved consolidators to establish consolidated views of pre-trade and post-trade information; or

(b) a single provider of a consolidated view of pre-trade and post-trade information established by an ASIC tender process.

This is because we are of the view that some element of regulatory intervention is necessary. Our intention is to set minimum operating standards for information consolidation. These standards are summarised in Appendix 5. We are also mindful that a number of data service providers already operate in Australia and are likely to create a consolidated view of pre-trade and post-trade information and offer consolidated data services on a commercial basis.

The mechanism for implementing the eventual approach would be setting obligations on market operators to provide data to an ASIC-approved consolidator.

Your feedback

K1Q1 Do you have views on the best way to implement a consolidated view of pre-trade and post-trade information in Australia?

K1Q2 After what time period should data be made available free of charge?

K1Q3 Will compliance with either option require any changes to your systems or procedures? What are the likely costs of such changes (where possible, please identify the nature of likely costs, quantify the estimated costs and indicate whether such costs will be one-off or ongoing)? Are there likely to be any significant impediments to making these changes?

K1Q4 Do you have views on whether either option is likely to impose any other additional costs or burdens on any class of stakeholder? Where possible, please identify the nature of the likely costs/burdens, quantify the estimated costs (including any assumptions and relevant data) and indicate whether such costs/burdens will be one-off or ongoing. Are there any other practical or implementation issues associated with either preferred option that we should be aware of?

K1Q5 What, if any, competition issues do you consider could be raised by each of the options proposed? If so, how could these issues be addressed?

K2 In order to be able to charge a reasonable price for the consolidated information, consolidators should be able to obtain trade information from market operators at a reasonable cost or at no cost, and on reasonable terms.

Your feedback

K2Q1 Should market operators be able to profit from providing information to consolidators or should market operators be obligated to provide their most socially valuable information, such as top five best bids and offers, for no fee or at cost?

K2Q2 Should market operators be obligated to provide information to consolidators on an equivalent basis to that they provide to other information users, such as, for example, co-location proprietary traders?

K2Q3 Do you consider it would be appropriate for a market operator, either directly or by way of commercial association, to be an ASIC-approved consolidator, or the single provider of consolidated information? If so, what additional protections should be put in place to ensure that competition issues are addressed?

403 We intend to settle our preferred approach after further industry consultation. Depending on the option implemented, we would consider what interim arrangements (if any) would need to be put in place.

L Market operators: Other obligations

Key points

In an environment with multiple market operators, a high degree of market-wide coordination will be required. We propose cooperation arrangements.

We propose that market operators must use common market participant identifiers and equity market product symbols.

To ensure data is chronologically recorded, we propose market operators synchronise their clocks to a Universal Time Clock.

We propose that tick sizes be harmonised across exchange markets.

We seek feedback on whether additional obligations are necessary for market operators relating to fair access and systems and controls.

Market operator cooperation

404 The 6 May 'flash crash' in the US was a stark reminder of the need for cooperation between market operators and regulators. It particularly focused attention on market-level controls and the importance of controls being harmonised and operating in unison.

405 As noted in Section E, market operators responded in different ways on 6 May. Circuit breakers slowed trading on NYSE, which some suggest exacerbated price volatility by causing a net loss of liquidity. Other markets experienced technical problems processing the large volume of orders, which also caused a shift in liquidity to other venues for immediate execution.[136]

406 It will also be important for market operators to coordinate for other reasons, such as trading halts responding to the release of price sensitive information (which ASX will retain responsibility for as part of its listing function), responding to external events (such as the 11 September attacks in the US) and in response to system outages. Coordination will minimise arbitrage opportunities between markets and contribute to the integrity of the markets.

Proposal

L1 We propose a market integrity rule requiring a market operator to comply with a protocol with ASIC and other market operators. The types of issues the protocol would address are:

[136] Joint Report, *Report on the preliminary findings regarding the market events of May 6, 2010*, US Commodity Futures Trading Commission and SEC, 18 May 2010, www.sec.gov/sec-cftc-prelimreport.pdf.

(a) the coordination of market operator controls as discussed in Section E (e.g. volatility controls and trade cancellations);

(b) arrangements for synchronising trading halts and suspensions relating to price sensitive information and external events;

(c) arrangements for managing system outages on one or multiple markets;

(d) arrangements for responding to market events and emergencies, such as a natural disaster;

(e) procedures for the assignment of common symbols and identifiers (as discussed below);

(f) arrangements for managing differences in operating hours between markets, including supervision of the continuous disclosure obligations;

(g) arrangements for cooperating with operators of derivative markets (e.g. ASX 24) or markets that offer financial products related to equity market products;

(h) expectations about information sharing; and

(i) general arrangements for cooperation.

A market operator must make available to other market operators information relating at least to real-time orders, executed trades and company announcements.

Draft Market Integrity Rule L1-1

Your feedback

L1Q1 Are there other components that we should consider, including in a cooperation protocol between market operators?

L1Q2 Should a market operator be required to provide information to other market operators for this purpose free of charge?

L1Q3 Will compliance with the proposed protocol require any changes to your systems or procedures? What are the likely costs of such changes (where possible, please identify the nature of likely costs, quantify the estimated costs and indicate whether such costs will be one-off or ongoing)? Are there likely to be any significant impediments to making these changes?

L1Q4 Do you have views on whether the proposed protocol is likely to impose any other additional costs or burdens on any class of stakeholder? Where possible, please identify the nature of the likely costs/burdens, quantify the estimated costs (including any assumptions and relevant data) and indicate whether such costs/burdens will be one-off or ongoing.

L1Q5 What is the impact, if any, of there being longer trading hours on a market other than the listing market (i.e. ASX)? This issue is discussed in REP 215, paragraphs 272–273.

L1Q6 What is the impact, if any, of new market operators having or not having an opening or closing auction? If new market operators have auctions, should they occur at the same time as those on ASX? This issue is discussed in REP 215, paragraphs 272–273.

Explanation and rationale

407 Cooperation and coordination in a multimarket environment will be imperative to upholding the integrity of the market.

408 We propose to put in place a cooperation protocol between market operators and ASIC, and to require market operators to comply with the protocol. The protocol would be public.

409 We expect that in a multimarket environment, market operators will need to share information relating at least to real-time orders, executed trades and company announcements. This will enable market operators to take account of market-wide events and may assist them in meeting their own regulatory obligations to operate a fair, orderly and transparent market.

Assignment of common identifiers

Proposal

L2 We propose market integrity rules that will require a market operator to:

(a) assign each market participant a unique identifier for trading purposes. A single identifier should be used for participants that are participants of more than one market; and

(b) use a unique identifier for equity market products, to be assigned by the listing market.

The identifiers should be provided to other market operators free of charge.

Draft Market Integrity Rules L2-1 and L2-2

Your feedback

L2Q1 Are there any practical problems with allowing the relevant market to assign the identifiers for new market participants? If so, would it be preferable to have a single entity responsible for this function? Is this something ASIC should undertake?

L2Q2 Are there any other identifiers that should be standardised?

L2Q3 Will compliance with the proposed obligations require any changes to your systems or procedures? What are the likely costs of such changes (where possible, please identify the nature of likely costs, quantify the estimated costs and indicate whether such costs will be one-off or ongoing)? Are there likely to be any significant impediments to making these changes?

L2Q4 Do you have views on whether the proposal is likely to impose any other additional costs or burdens on any class of stakeholder? Where possible, please identify the nature of the likely costs/burdens, quantify the estimated costs (including any assumptions and relevant data) and indicate whether such costs/burdens will be one-off or ongoing.

Explanation and rationale

410 In order to facilitate the consolidation of market data, ease of trading across markets and cross-market supervision, it will be important that there are common identifiers in place for market participants and equity market products. This will minimise duplication and the costs associated with users having to carry and map differing codes. We expect this proposal to have minimal cost impacts on market operators.

411 We consider that having a shared language of identifiers is a vital element of a fair, orderly and transparent market, and that the most practicable way of delivering this would be for the market as a whole to use the common identifiers developed by ASX.

412 In Canada, the Universal Market Integrity Rules (UMIR 10.15) mandate that, subject to separate agreement, the Toronto Stock Exchange must create the identifiers for market participants, as well as product symbols, and share them with other market operators.

413 In Europe, there are common instrument identifiers (i.e. the International Security Identification Number—ISIN) and participant identifiers (e.g. Bank Identification Codes (BICs) and, where they do not exist, the number allocated by the primary regulator is used).

414 In the US, there is an annual cost associated with the use and storage of CUSIPs (unique identifiers for US securities). In addition to adding cost, such 'user pay' arrangements may act as a barrier to consolidation.

415 The rationale for requiring that it be shared at no cost is to remove barriers to achieving these objectives.

Synchronised clocks

Proposal

L3 We propose market integrity rules that will require a market operator to synchronise the clocks of its trading, supervision and reporting systems to the Universal Time Clock (UTC) designated by ASIC (i.e. the clock of the National Measurement Institute (NMI)) to within a specified allowable tolerance, and must be able to demonstrate the level of its clocks' compliance with these rules.

A market operator must have procedures in place governing its connection to the clock, for managing drift and for restarting the synchronisation process.

To the extent that a market operator relies on third-party providers for trading, compliance or reporting purposes, the market operator must ensure the third-party providers synchronise their clock to the Universal Time Clock designated by ASIC.

We intend to set a clock for market participant systems to synchronise to (as is the requirement in Canada (UMIR 10.14)) after we have considered the responses to the proposal for market operators.

Draft Market Integrity Rules L3-1 to L3-3

Your feedback

L3Q1 Are there other sources besides the NMI that represent an accurate source from which to synchronise clocks?

L3Q2 What is an appropriate level of precision for the measurement of time? What is an appropriate level of 'allowable tolerance'? Should this be static or dynamic?

L3Q3 Should market participants using co-location services provided by market operators be required to synchronise their clocks sooner than other participants to facilitate surveillance and investigations?

L3Q4 What are the practical issues for market participants to synchronise their clocks?

L3Q5 Will compliance with the proposal require any changes to your systems or procedures? What are the likely costs of such changes (where possible, please identify the nature of likely costs, quantify the estimated costs and indicate whether such costs will be one-off or ongoing)? Are there likely to be any significant impediments to making these changes?

L3Q6 Do you have views on whether the proposal is likely to impose any other additional costs or burdens on any class of stakeholder? Where possible, please identify the nature of the likely costs/burdens, quantify the estimated costs (including any assumptions and relevant data) and indicate whether such costs/burdens will be one-off or ongoing.

Explanation and rationale

416 As discussed in Section B, in today's market, orders are being entered, modified, cancelled and executed at extraordinary speed. This applies pressure on market operators and market participants' clocks to be more granular in their measurement of time, especially in trade and reporting data systems.

417 In a multimarket environment, investors, market participants and ASIC will require access to consolidated trading information from the various venues. It will be important that the consolidated view is (as far as possible) in the sequence in which orders were entered and trades executed to ensure accurate data analysis. Market operators will also need to coordinate their activities (e.g. trading halts) based on consistent and accurate time.

418 The legal reference of time in Australia is Coordinated Universal Time (UTC (AUS)). This is maintained and disseminated by the NMI, a division of the Government's Department of Innovation, Industry, Science and Research. The NMI maintains a number of connection methods, including network time protocol (NTP) servers and rubidium clocks, which may represent sufficiently accurate links for market infrastructure to connect to.

419 Access to the NTP servers is free. Installation of a rubidium clock costs around $25,000. The NTP server provides traceable accuracy of around 20 milliseconds, while a rubidium clock provides accuracy to around 0.5 milliseconds (500 microseconds) and requires fewer synchronisations. The NMI also provides services to monitor time precision and accuracy across organisational systems, as well as compliance audit reports.

420 We would expect that each entity required to synchronise its clocks would have a regular checking mechanism which automatically adjusts the time if a variance with the designated UTC is detected, to maintain accuracy to within an 'allowable tolerance'.[137]

421 Commonly used electronic message protocols, including the FIX protocol, specify time fields with limited precision. We do not accept that limitations within existing message protocols should determine the level of accuracy and precision of synchronisation of the clocks used by market operators. We are considering whether market operators should be obliged to synchronise their clocks to UTC with a substantially greater level of accuracy and precision than is currently the case in Canada. Under such a proposal, orders and trades would be time stamped with a precision of 1 microsecond, and be accurate to within 1 millisecond.

[137] Market operator clocks in Canada synchronise every 1024 seconds, providing accuracy to within 10 milliseconds, and to record time to a precision of 1 millisecond.

422 Procedures should also be in place to 'restart' the synchronisation process once a day if required, at a time which minimises disruption to trading (preferably around midnight). We would also expect a market operator to be able to measure and offset any latency between its and the NMI's systems.

423 Additionally, market operators offering co-location services to market participants should include a synchronisation service with the co-location arrangements.

424 We would periodically review the clock systems of entities required to synchronise, to ensure that those entities are complying with the rules around precision and accuracy.

425 It may also be appropriate that data consolidator/s referred to in Section K synchronise their clocks to accurately timestamp the receipt of information.

Tick sizes

Proposal

L4 We propose a market integrity rule requiring a market operator to prevent orders in equity market products from being displayed, ranked or accepted in price increments less than those outlined below based on the price of the equity market product. These are the existing ASX tick sizes.

Price of the equity market product	Tick size
Greater or equal to $2	$0.01
Priced between $0.10 and $2	$0.005
Priced at less than $0.10	$0.001

An exception would apply for orders entitled to a pre-trade transparency exception (e.g. block trade).

Draft Market Integrity Rule L4

Your feedback

L4Q1 Do you have any views on our proposed approach to harmonising tick sizes?

L4Q2 Should we consider increasing the middle tier from ASX's current $2 to $20, as proposed by ASX?

L4Q3 Would it be preferable for tick sizes to be a function of price and trading volume? What are some of the practical challenges in implementing such an arrangement?

L4Q4 What approach should we take to reviewing tick sizes?

L4Q5 Will compliance with the proposal require any changes to your systems or procedures? What are the likely costs of such changes (where possible, please identify the nature of likely costs, quantify the estimated costs and indicate whether such costs will be one-off or ongoing)? Are there likely to be any significant impediments to making these changes?

L4Q6 Do you have views on whether the proposal is likely to impose any other additional costs or burdens on any class of stakeholder? Where possible, please identify the nature of the likely costs/burdens, quantify the estimated costs (including any assumptions and relevant data) and indicate whether such costs/burdens will be one-off or ongoing.

Explanation and rationale

426 Our proposal is consistent with existing ASX tick sizes. We note that ASX considered broadening the middle tier from an upper limit of $2 to $20 in 2009.

427 Tick sizes play an important role in transaction costs and in order routing decisions. There is a trade-off between ensuring the tick size is sufficiently wide to encourage investors to post limit orders while narrow enough to minimise transactions costs because:

(a) narrow tick sizes enable price improvement on order books, reducing the need for orders to move off-order book for price improvement—but this may discourage investors from placing limit orders because their order is offered little protection from other traders stepping ahead; and

(b) wider tick sizes value time priority, which means stepping ahead is more expensive—but it can lead to higher transaction costs and may encourage trading to move off-order book for price improvement.

428 There are strong incentives for market operators to undercut the tick sizes on competing markets, to offer execution priority. As already discussed, if tick sizes become too narrow, this may discourage investors from placing limit orders and may reduce liquidity at each price point, which may increase the overall cost of trading. In order to prevent a 'race to the bottom' on tick sizes and to protect investors and their confidence in the market, we consider it is important that there not be competition in tick sizes and to instead harmonise them across markets. Tick sizes are harmonised in the US and Canada and an industry solution has been agreed and implemented in Europe.

429 It will be important to keep the tick sizes under constant review so that investors can benefit from narrower spreads where there is sufficient liquidity, while limiting the possibility for stepping ahead by a economically insignificant amount.

430 High-frequency traders (discussed in Section B and Section F) and other market participants making two-sided quotes are likely to prefer smaller tick sizes to enable them to more easily price improve.

431 Further discussion of optimal tick sizes is in REP 215, paragraphs 257–271.

Fair access to markets: Your feedback

432 In order to benefit from competition and facilitate market integration, investors should have fair access to new (and existing) execution venues. This does not mean that every venue should be tailored to and permit all types of investors, but they should not discriminate within a class of investor.

433 To facilitate fair access, we consider it is important for market operators to have transparent market access arrangements, including fees and rebates. This will also facilitate compliance with best execution obligations. We also consider it is important for market operators to be transparent about how orders will be handled and executed once access is granted.

434 Fair access is already embedded in a market operator's obligations in s792A(a) of the Corporations Act, which requires market operators, to the extent it is reasonably practicable to do so, to do all things necessary to ensure that the market they operate is fair, orderly and transparent. Therefore, we are not proposing any new rules. However, we are interested in your feedback on a number of questions.

Issue

L5 We are interested in your feedback on whether we should supplement the rules applying to market operators in the Corporations Act and in RG 172 relating to access to their market.

Your feedback

L5Q1 Should market operators have a specific obligation to not unreasonably prohibit, condition or limit access to a person for which the market was established?

L5Q2 Should market operators be required to offer all of their services on a transparent, fair and non-discriminatory basis by making the services available to all market participants willing to pay for the services? Should the services also be available to non-participants (e.g. data/system vendors)? If so, on what basis?

L5Q3 Are there circumstances where services create an unfair barrier (e.g. where a market operator providers lower service standards to participants who do not co-locate and the difference in service is not justifiable by reference to the fact that the participant has not co-located)?

L5Q4 Do any issues arise from market operators having vertical pricing structures (e.g. combining or linking trading and clearing and settlement services or where a single party is responsible for setting trading and clearing and settlement fees)?

Market operator systems and controls: Your feedback

435 As discussed in Section B, markets have become increasingly electronic and fast, and volumes of orders and transactions are increasing substantially. This has increased the focus on systems and the controls around systems.

436 We expect that a market operator should, for each of its systems that support order entry, order routing, execution, trade reporting and trade comparison, have reasonable business continuity and disaster recovery plans. A market operator should also keep capacity requirements under review and conduct capacity stress tests.

437 Under s792A(d) of the Corporations Act, market operators already have a general obligation to ensure they maintain sufficient resources to operate the market properly. There is further guidance on this requirement in RG 172. We are not proposing any new rules, but we are interested in your feedback on a number of questions.

Issue

L6 We are interested in your feedback on whether we should supplement the rules applying to market operators in the Corporations Act and in RG 172 relating to their systems and controls.

Your feedback

L6Q1 Given the nature of the way markets are evolving to become more electronic, should there be a specific market integrity rule on market operators to have reasonable business continuity and disaster recovery plans, to conduct capacity stress tests, and to review the vulnerability of systems to internal and external threats?

L6Q2 Should there be a specific market integrity rule on market operators relating to their responsibilities when relying on a third party for the performance of operational functions that are critical for the provision of continuous services?

M Market participants: Other obligations

Key points

Trading in equity market products must be done under the operating rules of a market operator.

Market-integrity-related trading halts and suspensions apply equally to trading on CLOBs and off-order book.

A market participant should disclose to its clients its trade confirmation arrangements for dealing with orders that are filled across multiple markets.

Trades to be under the operating rules of a market operator

Proposal

M1 We propose a market integrity rule preventing a market participant from trading in equity market products by means other than under the operating rules of a market operator, unless the trade is pursuant to a primary market action (e.g. takeover bid).

Draft Market Integrity Rule M1

Your feedback

M1Q1 Do you have views on whether this proposal is likely to impose any additional costs or burdens on any class of stakeholder? Where possible, please identify the nature of the likely costs/burdens, quantify the estimated costs (including any assumptions and relevant data) and indicate whether such costs/burdens will be one-off or ongoing.

Explanation and rationale

438 We are proposing that all transactions by market participants be done under the operating rules of a market operator (either on a CLOB or off-order book). This will:

(a) ensure clients can access the full compensation entitlements on a licensed market; and

(b) limit the sources of pre-trade and post-trade data, which will facilitate our data consolidation objectives discussed in Section K.

439 Market participants are already required to transact on a licensed market (i.e. ASX). With competing exchange markets, there will be more choice of licensed markets.

Participant not to trade during trading halt

Proposal

M2 We propose a market integrity rule to prevent a market participant from transacting in equity market products during a market-integrity-related trading halt and/or suspension (e.g. responding to price movements, emergencies and price sensitive information).

Draft Market Integrity Rule M2

Your feedback

M2Q1 Do you agree that all trading in equity market products should stop during a trading market integrity halt or suspension, irrespective of where the trade is intended to take place?

M2Q2 Is it appropriate that this obligation would be limited to market participants or should it apply to all AFS licensees?

M2Q3 Will compliance with this proposal require any changes to your systems or procedures? What are the likely costs of such changes (where possible, please identify the nature of likely costs, quantify the estimated costs and indicate whether such costs will be one-off or ongoing)? Are there likely to be any significant impediments to making these changes?

M2Q4 Do you have views on whether this proposal is likely to impose any other additional costs or burdens on any class of stakeholder? Where possible, please identify the nature of the likely costs/burdens, quantify the estimated costs (including any assumptions and relevant data) and indicate whether such costs/burdens will be one-off or ongoing.

Explanation and rationale

440 Applying trading halts and suspensions that are in place for market integrity reasons equally to trading on CLOBs as to off-order book trading will minimise regulatory arbitrage opportunities.

441 We have limited the scope to market-integrity-related trading halts because we consider that trading should be permitted to continue during other types of trading halts (e.g. where there is a market system failure).

Participant may produce single trade confirmations

Proposal

M3 We propose to extend ASIC Market Integrity Rules (ASX Market) Rule 3.4 to allow all market participants that enter into multiple transactions for the purpose of completing a single client order to aggregate transactions into one confirmation and specify the volume-weighted average price (VWAP), provided:

(a) the client provides written authorisation to this arrangement; and

(b) the market participant provides individual prices to the client on request.

Draft Market Integrity Rule M3

Your feedback

M3Q1 Do you agree that the existing requirements in the Corporations Act and Corporations Regulations, as well as the proposed market integrity rules, are sufficient to ensure trade confirmations disclose sufficient information to clients in a multimarket environment?

M3Q2 Do you have views on whether this proposal is likely to impose any other costs or burdens on any class of stakeholder? Where possible, please identify the nature of the likely costs/burdens, quantify the estimated costs (including any assumptions and relevant data) and indicate whether such costs/burdens will be one-off or ongoing.

Explanation and rationale

442 In a multimarket environment, it will be important for trade confirmations to identify the market on which client orders are executed. Additionally, given it will be possible that a single client order may be executed across more than one market, there will need to be clear and consistent arrangements in place for disclosing such circumstances to clients.

443 Section 1017F(8) of the Corporations Act and reg 7.9.63 of the Corporations Regulations set out market participants' obligations for providing confirmations of transactions to retail clients. They require that trade confirmations include, among other things:

(a) if the transaction takes place in the ordinary course of business on a licensed market, identification of each licensed market of which the responsible person is a market participant;

(b) if the transaction takes place on-market, identification of the market;

(c) the price of the transactions;

(d) the equity market product and the number or amount of equity market products that are the subject of the transaction;

(e) if the trade takes place off-market, a statement to this effect; and

(f) whether the person dealt on their own behalf.

444 The regulations also require prior client authorisation to provide a single confirmation in respect of a series of transactions carried out under the order, instead of individual confirmations for each transaction in the series.

445 ASIC Market Integrity Rules (ASX Market) Rule 3.4 provides additional clarification about how a single confirmation can reflect price.

446 We consider that the existing rules and regulations, along with the proposed market integrity rule, adequately cater for a multimarket environment. We expect market participants to disclose to their clients whether they will provide a single confirmation in respect of a series of transactions carried out under a single order across multiple markets or individual confirmations in respect of each transaction. Market participants must disclose:

(a) *the identity of the market on which an order is executed*—where it is executed across multiple markets, for accumulated confirmations, each market would need to be identified;

(b) *the price of a transaction*—where it is executed across multiple markets, for accumulated confirmations, the price of each component would need to be identified; and

(c) *if the transaction was done off-order book*—where it is executed part on a CLOB and part off-order book, for accumulated confirmations, the price and volume of the CLOB component would need to be identified against the identifier of the market, and it would need to separately identify the component done off-order book.

447 Trade confirmations should be provided to clients as soon as reasonably practicable after the transaction occurs.

N Regulatory and financial impact

448 In developing the proposals in this paper, we have carefully considered their regulatory and financial impact. On the information currently available to us we consider they will strike an appropriate balance between:

(a) maximising market efficiency and opportunities for innovation; and

(b) mitigating risks to price formation and protecting the interests of investors and issuers.

449 Before settling on a final policy, we will comply with the Australian Government's regulatory impact analysis (RIA) requirements by:

(a) considering all feasible options, including examining the likely impacts of the range of alternative options which could meet our policy objectives;

(b) if regulatory options are under consideration, notifying the Office of Best Practice Regulation (OBPR); and

(c) if our proposed option has more than minor or machinery impact on business or the not-for-profit sector, preparing a Regulation Impact Statement (RIS).

450 All RISs are submitted to the OBPR for approval before we make any final decision. Without an approved RIS, ASIC is unable to give relief or make any other form of regulation, including issuing a regulatory guide that contains regulation.

451 To ensure that we are in a position to properly complete any required RIS, we ask you to provide us with as much information as you can about:

(a) the likely compliance costs;

(b) the likely effect on competition; and

(c) other impacts, costs and benefits,

of our proposals or any alternative approaches: see 'The consultation process', p. 5.

Appendix 1: Our 2007 position on competing markets and feedback to CP 95

452 ASIC consulted twice in 2007 on competition for exchange market services. CP 86 was published in July 2007 and related to the then market licence applications by AXE–ECN and Liquidnet. A subsequent consultation paper (CP 95) was published in November 2007, which summarised the responses to CP 86 and outlined proposals for a regulatory framework to support competition between licensed markets in equity market products. A key element of that paper related to cross-market supervision arrangements. This has now been addressed with the transfer of real-time market and participant supervision to ASIC.

453 Other issues discussed were best execution, pre-trade and post-trade transparency, takeover arrangements and short sales. Our position at the time and the feedback we received on each is described below.

Best execution

454 We proposed in CP 95 that a best execution obligation should apply to holders of an AFS licence who are participants on more than one market that trades equity market products and that accepts instructions from clients. At the time, we considered that a participant in only one market does not have a choice of venue on which to execute trades. It was not our intention to force participants to become members of multiple markets. While respondents to CP 95 generally supported this approach, we have reassessed the position and believe best execution should apply even to those participants of a single market. Because markets have evolved and there is now more choice of execution arrangements available (e.g. markets, dark pools, internalisation), we consider that a best execution obligation should apply more broadly. If a best execution obligation applied solely to participants of multiple markets, it may act as a disincentive for brokers to participate on new markets, undermining the benefits of competition.

455 In CP 95, we proposed a European-style best execution obligation. Under this model, brokers would be obliged to decide the market on which to execute transactions by reference only to factors relating to the client's instructions and the available market that is most likely to result in a transaction which best meets those instructions.

456 The list of factors that brokers could take into account relating to the client's instructions included: price, nature, size, costs, certainty and speed of execution and preferred execution venue.

457 Responses to CP 95 were mixed. While some respondents supported the flexibility that the proposals offered, some respondents suggested that price

should be the determining factor (similar to the US and Canadian models). They argued that price would provide the best protection for retail clients and make it easier to evidence compliance. We have taken account of this feedback in our proposals in Section G of this paper.

Pre-trade transparency

458 In CP 95, we proposed requiring pre-trade transparency only once a market's proportion of trading reached 5% or more of the total volume of trading across all licensed markets.

459 Responses to the consultation confirm that there are valid reasons for some types of transactions to occur in an environment with minimal or no pre-trade transparency. Respondents particularly pointed to large transactions where market impact costs are high. However, most respondents did not support the proposed 5% approach on the basis that:

(a) the proposed limit would be too complex to calculate and administer;

(b) it was unclear what would happen when a market reached the 5% limit;

(c) the incumbent market operator would be immediately subject to pre-trade transparency requirements, while new markets would not;

(d) market participants would be able to conduct non-transparent trades across a number of markets; and

(e) a proliferation of new market operators may result in a high aggregate level of non-transparent trading.

460 We acknowledge these issues and we are proposing a different model: see Section H.

Post-trade transparency

461 We consulted in CP 95 on the mechanism for publishing post-trade information. We proposed that there should be a MiFID-style market forces solution. We proposed a r rule requiring market operators to make post-trade information available in a way that can be consolidated with the trading data of other markets and to have a contractual arrangement with at least one information vendor for the publication of the data.

462 The consultation did not describe the information that ought to be made public nor the timeframes for publication.

463 There was general support for the proposals among respondents and the information vendors confirmed that they could, and would, consolidate information from the various sources. However, experience in Canada and Europe has proven that market forces may not be sufficient to incentivise information vendors to consolidate all information at reasonable cost.

464 We have taken account of this feedback in our discussion on consolidated market data in Section K.

Trading during a takeover

465 We noted that it would be important for all markets to have standardised rules about trading behaviour during takeovers. Respondents to CP 95 agreed. We propose that all market operators will be subject to market integrity rules to deliver the same outcome. We propose to address this through specific market integrity rules for each market operator.

Short selling

466 In CP 95 we noted the importance of standardised short selling rules across all licensed markets. Respondents agreed.

467 Since CP 95 was issued, we have undertaken considerable work on the regulatory framework for short selling, including working with the Government on new laws and regulations, which have been implemented in 2009 and 2010. In particular:

(a) the new short selling provisions under the Corporations Act apply across all licensed markets and not just ASX;

(b) the Government has mandated a reporting framework that requires:

(i) gross transactional reporting to the operator of a licensed market, which commenced on 11 December 2009. Brokers are required to record daily short sales made on their own behalf or on behalf of their clients and to report these volumes to the market operator the next trading day. The market operator is then obliged to publish aggregated figures per product on its website; and

(ii) reporting of short positions to ASIC, which commenced on 1 June 2010; and

(c) naked short sales are prohibited under the Corporations Act, subject to exceptions (for more information, see RG 196).[138]

468 For gross transactional reporting of short sales, we intend to introduce a requirement for the tagging of short sale trades at the time the sale order is placed. This means market operators will need to have in place infrastructure to allow electronic tagging of trades.

469 We have a proposal on short sale tagging in Section I.

[138] For example, ASIC Class Order [CO 09/774] *Naked short selling relief for market makers exempts certain market makers when they are hedging risk.*

Appendix 2: Chi-X's application

470 Chi-X Australia Pty Ltd (Chi-X) is a wholly owned Australian incorporated subsidiary of Chi-X Global, Inc. (Chi-X Global), a US Delaware incorporated company. Chi-X Global is a member of the Instinet group of companies, with Instinet Incorporated (Instinet) the parent holding company in the group, itself being owned by Nomura Holdings, Inc. As discussed in Section A, Chi-X has applied for an Australian market licence to offer trading services in equity market products. The Government announced in-principle approval of the application in March 2010.

471 The Chi-X brand first appeared in Europe in March 2007, when Instinet launched Chi-X Europe—a multilateral trading facility (MTF). Chi-X Europe provides a venue for the trading of equities, exchange-traded funds (ETFs) and exchange-traded commodities (ETCs) admitted to trading in 15 European countries. For the second quarter of 2010, Chi-X Europe had in excess of 20% market share for equities trading within the major European markets of the UK, France and Germany.

472 Chi-X Europe is independent from Chi-X Global, albeit Instinet still has a 34% stake in Chi-X Europe. The remainder is owned by a consortium of major global financial institutions, including BNP Paribas, Citadel, Citigroup, Credit Suisse, Fortis, GETCO Europe Ltd, Goldman Sachs, Merrill Lynch, Morgan Stanley, Optiver, Société Générale and UBS.

473 Chi-X Global was established in 2008 with the launch of Chi-X Canada—an alternative trading system (ATS). Chi-X Global also launched Chi-X Japan, a proprietary trading system, in July 2010. For the month of July 2010, Chi-X Canada had a market share in excess of 10% for the main Toronto Stock Exchange index S&P/TSX 60. It is too early to determine market share for Chi-X Japan.

474 Chi-X Global is also planning to launch Chi-East, which is a joint venture between Chi-X Global and the Singapore Exchange (SGX). Chi-East will operate as a dark pool venue. Its application to become a recognised market operator was recently approved by the Monetary Authority of Singapore (MAS).[139]

Chi-X's application

475 In April 2008, Chi-X submitted a formal application to ASIC for an Australian market licence.

[139] Chi-East News Release, *Chi-East receives regulatory approval to launch independent, pan-Asian, non-displayed trading venue*, Chi-East Pte Ltd, 4 October 2010.

Financial products

476 In Australia, Chi-X is initially proposing that participants be able to use its venue to trade ASX-quoted securities in the S&P/ASX 200 index and exchange-traded funds. Chi-X proposes to expand the product universe for on-market trading based on participant demand.

477 In future, and also subject to market participant demand, Chi-X may offer trading in a wider range of financial products, such as exchange-traded derivatives.

Nature of trading

478 Chi-X proposes that trading on its market will operate via a CLOB similar to that currently employed by ASX.

479 It is expected that for the majority of trading on the Chi-X market, a market participant will enter an order onto the CLOB, either on its own behalf or on behalf of a client, to buy/sell a prescribed volume or financial value of a product. Orders will be matched on a price–visibility–time priority basis.

480 The proposed time for Chi-X's continuous trading period is 9.45 am to 4.30 pm. This differs from the normal trading hours on the ASX market, which is from 10 am to 4 pm.

481 Chi-X does not propose to operate either an opening or closing price auction, nor will it stagger the opening of trading for different products. Trading in all products on the Chi-X market will simply open for trading at the same time.

482 It is proposed that all orders entered onto the Chi-X CLOB by market participants will be visible (i.e. pre-trade transparent), with the exception of certain undisclosed orders and the hidden component of iceberg orders.

483 All trades executed on the Chi-X market will be subject to the post-trade transparency requirements, in accordance with the final market integrity rules.

484 Chi-X is proposing to allow a number of different order types to be entered onto its CLOB. These order types include:

(a) *limit orders*—specified quantity of a product at a specified price or better;

(b) *pegged orders*—specified quantity of a product set to track a reference price (e.g. the market-wide best bid and offer);

(c) *hidden orders*—where the price and volume of the order is undisclosed. These orders will not have time priority (i.e. they will rank lower than visible orders at the same price);

(d) *iceberg orders*—where the price and a certain portion of the volume is disclosed, but the remainder of the volume is undisclosed; and

(e) *partially undisclosed orders*—where the price is disclosed but the volume is not.

485 At present, Chi-X is not proposing to operate a dark execution venue.

Listing

486 Chi-X is not proposing to provide any listing services on its own market. Chi-X and ASX will need to cooperate to ensure coordination of trading halts, suspensions and de-quoting relating to the listing function: see Section L.

487 Under the current market supervisory arrangements, ASX has responsibility for the listing of entities on its market, as well as the monitoring of continuous disclosure issues for those listed entities. Chi-X is not proposing to undertake any supervision of the entities whose products are traded on the ASX market.

Clearing and settlement

488 Chi-X is negotiating with ASX Clear and ASX Settlement for them to provide the clearing and settlement of trades executed on the Chi-X market. In particular, and subject to the negotiations, Chi-X proposes to enter into a contract for ASX Group's Trade Acceptance Service (TAS). TAS will enable transactions executed on non-ASX trading venues (Approved Market Operator or AMO) to be accepted by ASX Clear and ASX Settlement for clearing and settlement. The service includes the facilitation of CHESS messaging between the AMO and ASX Clear and ASX Settlement for trade acceptance purposes and technical and operational support provided to AMOs. In effect, Chi-X market participants will clear and settle Chi-X market trades through the current participants and clearing and settlement facilities of ASX Clear and ASX Settlement.

489 The operating rules of ASX Clear will apply equally to trades done on ASX as to those done on any AMO.

490 The Chi-X trade settlement cycle will be synchronised with the ASX settlement cycle. It is proposed that all ASX and Chi-X trades will be netted on an aggregate basis, irrespective of the market of execution, and settled through CHESS in the normal settlement cycle. Three days is the current settlement period for trades executed on ASX (with some exceptions).

Market participants

491 It is expected that many of Chi-X's participants will deal for or on behalf of retail clients.

492 It is anticipated that the majority of the initial Chi-X participants will also be existing ASX participants or sophisticated financial institutions that are currently using the ASX market (either directly or through an ASX participant).

Compensation

493 Parties that operate a market available to retail investors must ensure there are appropriate compensation arrangements in place to meet certain claims arising from dealings between investors and market participants. The compensation scheme that applies to ASX is known as the National Guarantee Fund, which operates under Div 4 of Pt 7.5 of the Corporations Act. Other market operators are required to maintain their own compensation schemes under Div 3.

494 Div 3 compensation arrangements cover against retail investor losses relating to:

(a) the defalcation or fraudulent misuse of the money or other property by the participant—if the client gave the participant money or other property; or

(b) the fraudulent misuse of that authority—if the client gave the participant authority over property.

495 Certain types of losses are excluded from Div 3 protection where:

(a) the requirements of s885C(1) of the Corporations Act are satisfied;

(b) the loss is also connected with a financial market to which Div 4 of the Corporations Act applies;

(c) the person did not (expressly or impliedly) instruct the participant to use a particular one of those markets; and

(d) it is not reasonably apparent from the usual business practice of the participant which of those markets the participants would use when acting for the person.

Appendix 3: Best execution reporting requirements

Market participants: Order routing report

496 The best execution proposals require a market participant to demonstrate on request that it has executed client orders in accordance with best execution requirements and to disclose within 15 business days from a request of a client:

(a) the identity of the execution venues to which the client's orders were routed for execution in the one month before the request;

(b) whether the orders were client-directed orders or non-client-directed orders; and

(c) the time of the executions, if any, that resulted from such orders.

497 The proposals also require a market participant to make publicly available a monthly report evidencing:

(a) all execution venues used;

(b) the percentage of total orders that were:

(i) client-directed; and

(ii) non-client-directed;

(c) of the total non-client-directed orders, the percentage of orders ≤$200,000 and the percentage of orders >$200,000;

(d) of the total non-client-directed orders ≤$200,000, the percentage of market orders, marketable limit orders and other order types;

(e) of the total non-client-directed orders >$200,000, the percentage of market orders, marketable limit orders and other order types; and

(f) details of any relationship between the market participant and an execution venue, including ownership arrangements, profit-sharing and payment for order flow.

498 Each report should be publicly available within one month of the completion of the reported month.

499 A sample report format is shown in Table 19 at the end of this appendix.

Execution venues: Liquidity and trade execution report

500 The best execution proposals require an operator of an execution venue to make publicly available monthly reports on their liquidity and trade execution.

501 The report should be produced by all execution venues within one month of the completion of the reported month. Any market participant that executes

client order flow outside licensed markets would be expected to publish these reports.

502 For each equity market product, information should be categorised by:

(a) five types of order[140]—market order (MO), marketable limit order (MLO), inside-the-quote limit order (IQLO), at-the-quote limit order (AQLO) and near-the-quote limit order (NQLO); and

(b) five order size groups—≤$199, $200–$499, $500–$999, $1000–$4999 and ≥$5000.

Liquidity statistics

503 For all orders received by the execution venue within the reported month (including those orders that were routed to another execution venue), the information to be reported includes the total number and value of orders that have been:

(a) received;

(b) cancelled;

(c) executed; and

(d) routed to another execution venue.

504 A sample report format is shown in Table 20a at the end of this appendix.

Trade execution statistics

505 For all trades executed on the venue within the reported month (excluding those orders that were routed to another venue), the information to be reported includes:

(a) the total value of trades executed on the execution venue in five time-bands (0–2.99, 3–9.99, 10–19.99, 20–29.99 and ≥30 milliseconds);

(b) the total value of trades from the execution of orders that were not pre-trade transparent;

(c) volume-weighted average (VWA) realised spread;

Note 1: 'Realised spread' means: for buy orders, double the amount of the difference between the execution price and the midpoint of the consolidated best bid and offer 5 minutes after the time of order execution; and, for sell orders, double the amount of the difference between the midpoint of the consolidated best bid and offer 5 minutes after the time of order execution and the execution price.

[140] A 'marketable limit order' (MLO) is any buy order with a limit price equal to or greater than the consolidated best offer at the time of order receipt, and any sell order with a limit price equal to or less than the consolidated best bid at the time of order receipt. An 'inside-the-quote limit order' (IQLO), an 'at-the-quote limit order' (AQLO) and a 'near-the-quote limit order' (NQLO) mean non-marketable buy orders with limit prices that are, respectively, higher than, equal to, and lower by $0.10 or less than the consolidated best bid at the time of order receipt, and non-marketable sell orders with limit prices that are, respectively, lower than, equal to, and higher by $0.10 or less than the consolidated best offer at the time of order receipt.

Note 2: The midpoint of the final consolidated best bid and offer disseminated for regular trading hours is to be used to calculate a realised spread if it is disseminated less than 5 minutes after the time of order execution.

(d) VWA access fees;

(e) VWA effective spread;

Note: 'Effective spread' means: for buy orders, double the amount of the difference between the execution price and the midpoint of the consolidated best bid and offer at the time of order receipt; and, for sell orders, double the amount of the difference between the midpoint of the consolidated best bid and offer at the time of order receipt and the execution price.

(f) for shares executed with price improvement:

(i) the total value of shares executed;

(ii) the VWA amount that prices were improved; and

(iii) the VWA period from the time of order receipt to the time of order execution (in milliseconds);

Note: 'Executed with price improvement' means: for buy orders, execution at a price lower than the consolidated best offer at the time of order receipt; and, for sell orders, execution at a price higher than the consolidated best bid at the time of order receipt.

(g) for shares executed at-the-quote:

(i) the total value of shares executed;

(ii) the VWA amount that prices were executed at-the-quote; and

(iii) the VWA period from the time of order receipt to the time of order execution (in milliseconds); and

Note: 'Executed at-the-quote' means: for buy orders, execution at a price equal to the consolidated best offer at the time of order receipt; and, for sell orders, execution at a price equal to the consolidated best bid at the time of order receipt.

(h) for shares executed with trade-through:

(i) the value of shares executed;

(ii) the VWA amount that prices were executed outside-the-quote; and

(iii) the VWA period from the time of order receipt to the time of order execution (in milliseconds).

Note: 'Executed with trade-through' means: for buy orders, execution at a price higher than the consolidated best offer at the time of order receipt; and, for sell orders, execution at a price lower than the consolidated best bid at the time of order receipt.

506 Sample report formats for the trade execution reports are shown in Table 20b and Table 20c at the end of this appendix.

Table 19: Order routing—Market Participant XYZ for the month ending YYYYMM

Execution venues used	Total orders		Total non-client-directed orders		Total non-client-directed orders ≤$200,000			Total non-client-directed orders >$200,000		
	Client-directed orders (%)	Non-client-directed orders (%)	Non-client-directed orders ≤$200,000 (%)	Non-client directed orders >$200,000 (%)	MO (%)	MLO (%)	Other (including not held) (%)	MO (%)	MLO (%)	Other (including not held) (%)
ABC Exchange										
XYZ Exchange										
AAA Internaliser										

Relationship details

Discuss any material aspects of the market participant's relationship with each execution venue, including a description of any arrangements.

Note: MO = market order and MLO = marketable limit order.

Table 20a: Liquidity statistics—AAA Execution Venue for the month ending YYYYMM

Venue code	Stock code	Order type	Order size	No. of orders				Value of orders ($)			
				Received	Cancelled	Executed	Routed to another venue	Received	Cancelled	Executed	Routed to another venue
AAAEV	BHP	MO	≤$199								
			$200–$499								
			$500–$999								
			$1000–$4999								
			≥$5000								
		MLO	≤$199								
			$200–$499								
			$500–$999								
			$1000–$4999								
			≥$5000								
		IQLO	≤$199								
			$200–$499								
			$500–$999								
			$1000–$4999								
			≥$5000								
		AQLO	≤$199								
			$200–$499								
			$500–$999								
			$1000–$4999								
			≥$5000								
		NQLO	≤$199								
			$200–$499								
			$500–$999								
			$1000–$4999								
			≥$5000								

Note: MO = market order, MLO = marketable limit order, IQLO = inside-the-quote limit order; AQLO = at-the-quote limit order and NQLO = near-the-quote limit order.

Table 20b: Value of trades in time-bands (milliseconds)—AAA Execution Venue for the month ending YYYYMM

Venue code	Stock code	Order type	Order size	Value of trades ($)				
				0–2.99 ms	3–9.99 ms	10–19.99 ms	20–29.99 ms	≥30 ms
AAAEV	BHP	MO	≤$199					
			$200–$499					
			$500–$999					
			$1000–$4999					
			≥$5000					
		MLO	≤$199					
			$200–$499					
			$500–$999					
			$1000–$4999					
			≥$5000					
		IQLO	≤$199					
			$200–$499					
			$500–$999					
			$1000–$4999					
			≥$5000					
		AQLO	≤$199					
			$200–$499					
			$500–$999					
			$1000–$4999					
			≥$5000					
		NQLO	≤$199					
			$200–$499					
			$500–$999					
			$1000–$4999					
			≥$5000					

Note: MO = market order, MLO = marketable limit order, IQLO = inside-the-quote limit order; AQLO = at-the-quote limit order and NQLO = near-the-quote limit order.

Table 20c: Volume-weighted averages (VWAs) and other statistics—AAA Execution Venue for the month ending YYYYMM

Venue code	Stock code	Order type	Order size	Value of trades from execution of non-pre-trade transparent orders ($)	VWA realised spread (cents)	VWA access fees per unit (cents)	VWA effective spread (cents)	Orders executed with price improvement			Orders executed at-the-quote			Orders executed with trade-through		
								Value of shares executed ($)	VWA per unit (cents)	VWA time period (ms)	Value of shares executed ($)	VWA per unit (cents)	VWA time period (ms)	Value of shares executed ($)	VWA per unit (cents)	VWA time period (ms)
AAAEV	BHP	MO	≤$199													
			$200–$499													
			$500–$999													
			$1000–$4999													
			≥$5000													
		MLO	≤$199													
			$200–$499													
			$500–$999													
			$1000–$4999													
			≥$5000													
		IQLO	≤$199													
			$200–$499													
			$500–$999													
			$1000–$4999													
			≥$5000													
		AQLO	≤$199													
			$200–$499													
			$500–$999													
			$1000–$4999													
			≥$5000													
		NQLO	≤$199													
			$200–$499													
			$500–$999													
			$1000–$4999													
			≥$5000													

Note: MO = market order, MLO = marketable limit order, IQLO = inside-the-quote limit order; AQLO = at-the-quote limit order and NQLO = near-the-quote limit order.

Appendix 4: Pre-trade and post-trade transparency data requirements

507 To facilitate the data consolidation process it is important to harmonise data published by each execution venue. ASIC intends to define data requirements for publication of pre-trade and post-trade information. In turn, market participants may need to enhance trading systems to meet our data requirements. Harmonising pre-trade and post-trade data may result in a new trade message protocol or the adoption of an existing protocol (e.g. FIX protocol). We will consult with industry practitioners and protocol owners to ensure the implementation of ASIC data requirements is consistent with industry best practice.

508 Table 21 and Table 22 summarise ASIC's proposed data requirements for pre-trade and post-trade transparency. Suggested data field content and formats are shown. We note that certain condition data fields may not apply to all markets and some data fields may map to information already provided by ASX.

509 Table 23 summarises ASIC's proposal for data items required by ASIC to improve market surveillance capacity. This information will pass from market participant, to execution venue, to data consolidator and to ASIC. It will not be visible to commercial users of consolidated data or to users of execution venue market data products.

510 Off-market transactions by market participants must be published, irrespective of where the counterparty is located (i.e. irrespective if overseas).

511 For proposed 'Origin-of-order category' and 'Origin-of-order ID' data, we expect market participants to enhance trading systems to add this information to orders and trade reports without the requirement for additional data entry at trade time. We understand that, if required, adding static data to client records is a major undertaking. We may require more than one 'Origin-of-order ID'. For example, an order may show IDs for both 'DEA channel ID' and for 'Large trader ID'.

Table 21: Pre-trade transparency—Data requirements

No.	Data requirement	Description	Content/format	New requirement
1	Order date	The day on which the order was taken	ISO 8601—8-character numeric code YYYYMMDD	
2	Product identification	A code that uniquely identifies the product	Ticker symbol The 'human understood' product identification code of the listing market (e.g. ASX Security Code)	
3	Order side	Buy, sell or short sell	Characters 1	
4	Order type	For example: market, limit, pegged	Characters 1	
5	Price	The price per share, excluding commission Required for limit orders	An integer in dollar units to the appropriate number of decimal places (e.g. Chi-X maximum 12 digits for integer part; maximum 7 digits for decimal part)	
6	Currency	Required only where the currency is not AUD	ISO 4217—currency codes Characters 3	✓
7	Volume	The quantity of order	An integer expressing the number of whole units Integer 10	
8	Execution venue identification	The market operator that receives the order	Exchange market code ISO 10383—MIC	✓
9	Special market	A code that describes the basis of quotation for an order submitted to a special market	Cum special market Ex special market	✓

Table 22: Post-trade transparency—Data requirements

No.	Data requirement	Description	Content/format	New requirement
1	Trade date	The day on which the transaction was reported	ISO 8601—8-character numeric code YYYYMMDD	
2	Trade execution date (as at date)	The day on which the transaction was executed (only if different from the 'Trade date')	ISO 8601—8-character numeric code YYYYMMDD	
3	Trading time	The time at which the transaction was executed in Australian Eastern Standard time (not the time a trade was reported) Accurate to +/–1 millisecond for trades executed on a market execution venue: see 'Synchronised clocks' in Section L	ISO 8601—12-character numeric code to an accuracy of +/–1 millisecond Precision of 1 microsecond HHMMSSFFFFFF	
4	Date to settle	Required if the date to settle is not the default for this security The day on which the transaction is scheduled to settle	ISO 8601—8-character numeric code YYYYMMDD	
5	Product identification	A code that uniquely identifies the product	Ticker symbol The 'human understood' product identification code of the listing market (e.g. ASX Security Code)	
6	Price	The price per share, excluding commission Required for limit orders	An integer in dollar units to the appropriate number of decimal places (e.g. Chi-X maximum 12 digits for integer part; maximum 7 digits for decimal part)	
7	Currency	Required only where the currency is not AUD	ISO 4217—currency codes Characters 3	✓
8	Volume	The quantity of trade	An integer expressing the number of whole units Integer 10	
9	Execution venue identification	The market operator that receives the order For transactions executed off-book: • OTC; or • defined values for specific dark venues or for categories of dark venues	For exchange markets: ISO 10383—MIC	✓
10	Trade ID	A code that uniquely identifies the transaction Must ensure resultant CHESS settlement instruction identifiers are unique	Maximum characters 20	

No.	Data requirement	Description	Content/format	New requirement
11	Trade cancellation reason	An indication that the transaction is cancelled and the cancellation reason—for example: • incorrect broker • incorrect price • incorrect security code • incorrect volume • omitted • data entry error • trading halt • system failure	Characters 1	
12	Original trade reporting date	Required for trade cancellations	ISO 8601—8-character numeric code YYYYMMDD	
13	Ticker permission indicator	For transactions that should not be published on the consolidated tape (e.g. bookings purposes only) • N	Characters 1	
14	Condition code: ASIC	The trade executed away from a pre-trade transparent market: • block trade exception • large portfolio trade exception • price improvement exception—between the spread and >specified value • undisclosed orders exception—a dark order on a pre-trade transparent market and >specified value • out-of-hours trading exception		✓
15	Basis of quotation: ASIC	A code that describes a trade executed in a special market • cum special market • ex special market		✓

Table 23: ASIC surveillance—Data requirements

No.	Data requirement	Description	Content/format	ASX Signal B field value	Requirement		
					New	Pre-trade	Post-trade
1	Order date	The day on which the order was taken	ISO 8601—8-character numeric code YYYYMMDD			✓	
2	Order time	The time at which the market participant took the order	ISO 8601—6-character numeric code HHMMSS—UTC			✓	
3	Order side	Buy, sell or short sell	Characters 1			✓	
4	Order type	For example: market, limit, pegged	Characters 1			✓	
5	Trade date	The day on which the transaction was reported	ISO 8601—8-character numeric code YYYYMMDD	YYYYMMDD			✓
6	Trade execution date (as at date)	The day on which the transaction was executed (only if different from the 'Trade date')	ISO 8601—8-character numeric code YYYYMMDD	YYYYMMDD			✓
7	Trading time	The time at which the transaction was executed in Australian Eastern Standard time (not the time a trade was reported) Accurate to +/–1 millisecond for trades executed on a market execution venue: see 'Synchronised clocks' in Section L	ISO 8601—12-character numeric code to an accuracy of +/–1 millisecond—precision of 1 microsecond HHMMSSFFFFFF	HHMMSS			✓
8	Date to settle	Required if the date to settle is not the default for this security The day on which the transaction is scheduled to settle	ISO 8601—8-character numeric code YYYYMMDD	YYYYMMDD			✓
7	Product identification	A code that uniquely identifies the product	Ticker symbol The 'human understood' product identification code of the listing market (e.g. ASX Security Code)	ASX security code		✓	✓
8	Price	The price per share, excluding commission Required for limit orders	An integer in dollar units to the appropriate number of decimal places (e.g. Chi-X maximum 12 digits for integer part; maximum 7 digits for decimal part)			✓	✓
9	Currency	Required only where the currency is not AUD	ISO 4217—currency codes Characters 3			✓	✓
10	Volume	The quantity of order or trade	An integer expressing the number of whole units Integer 10			✓	✓

No.	Data requirement	Description	Content/format	ASX Signal B field value	Requirement		
					New	Pre-trade	Post-trade
11	Short sale quantity	The quantity short sold	An integer expressing the number of whole units Integer 10		✓	✓	✓
12	Execution venue identification	The market operator that receives the order For transactions executed off-order book: • OTC; or • defined values for specific dark venues or for categories of dark venues	For exchange markets: • ISO 10383—MIC For transactions executed off-order book, defined values for specific dark venues or for categories of dark venues		✓[141]	✓	✓
13	Trade ID	A code that uniquely identifies the transaction Must ensure resultant CHESS settlement instruction identifiers are unique	Maximum characters 20			✓	✓
14	Trade cancellation reason	An indication that the transaction is cancelled and the cancellation reason—for example: • incorrect broker • incorrect price • incorrect security code • incorrect volume • omitted • data entry error • trading halt • system failure	Characters 1				✓
15	Original trade reporting date	Required for trade cancellations	ISO 8601—8-character numeric code YYYYMMDD				✓
16	Broker ID: • buy broker	A code that uniquely identifies a market participant Currently allocated by ASX	4-character numeric code	9999		✓	✓[142]
17	Broker ID: • sell broker	A code that uniquely identifies a market participant Currently allocated by ASX	4-character numeric code	9999		✓	✓[143]

[141] ASX Signal B field 'Exchange ID' currently denotes all trades as 'ASX national'.
[142] Post-trade broker anonymity applies except for settlement and supervision purposes.
[143] Post-trade broker anonymity applies except for settlement and supervision purposes.

No.	Data requirement	Description	Content/format	ASX Signal B field value	Requirement		
					New	Pre-trade	Post-trade
18	Ticker permission indicator	For transactions that should not be published on the consolidated tape (e.g. bookings purposes only)	Characters 1				✓
19	Origin-of-order category: • buy	Categories that describe the origin of the buy and sell orders All or a subset of values described in Section I	Proprietary trading—facilitation Proprietary trading Professional investor Wholesale sophisticated investor Wholesale investor Retail investor		✓	✓	✓
20	Origin-of-order ID: • buy	Identifiers that describe the origin of the buy and sell orders Identify both the type and the value of the identifier An order may include more than one set of identifiers (e.g. the investor's broker account ID and an MDA adviser ID responsible for MDA trading)	Investor account ID Algorithm ID DEA channel ID IP address HIN SRN Large trader ID MDA adviser ID		✓	✓	✓
21	Origin-of-order category: • sell	Categories that describe the origin of the buy and sell orders All or a subset of values described in Section I	Proprietary trading—facilitation Proprietary trading Professional investor Wholesale sophisticated investor Wholesale investor Retail investor		✓	✓	✓
22	Origin-of-order ID: • sell	Identifiers that describe the origin of the buy and sell orders Identify both the type and the value of the identifier An order may include more than one set of identifiers (e.g. the investor's account ID with the market participant and an MDA adviser ID responsible for MDA trading)	Investor account ID Algorithm ID DEA channel ID IP address HIN SRN Large trader ID MDA adviser ID		✓	✓	✓

No.	Data requirement	Description	Content/format	ASX Signal B field value	Requirement		
					New	Pre-trade	Post-trade
23	Condition code: ASIC	The trade executed away from a pre-trade transparent market based on:	Block trade exception Large portfolio trade exception Price improvement exception—between the spread and >specified value Undisclosed orders exception—a dark order on a pre-trade transparent market and >specified value Out-of-hours trading exception		✓		✓
24	Basis of quotation: ASIC	A code that describes a trade executed in a special market	Cum special market Ex special market		✓	✓	✓

Appendix 5: Draft standards for data consolidator/s

Service offering

512 Consolidator/s should at a minimum offer a whole-of-market consolidated view of the top five bids and offers per equity market products and all post-trade information for equity market products. They should ensure that this data is made publicly available in a non-discriminatory manner and at a reasonable price.

Data quality

513 Consolidator/s must ensure that data is collected and processed in a timely, accurate and reliable way. They should, for example, validate data in real-time.

Fees and charges

514 Consolidator/s must ensure that each data product is made available on an unbundled basis, at a reasonable cost to investors. Consolidator/s must also ensure that their fee schedules are transparent and easily available. Required data should be available at no charge after a short delay.

System and technology requirements

515 Consolidator/s must ensure that they:

(a) have appropriate systems and controls to perform their functions;

(b) use common data formats, permitting commercially viable usage;

(c) offer appropriate support to their users, including a testing environment;

(d) have procedures to control aberrant data entry;

(e) synchronise their system clocks to the clock designated by ASIC; and

(f) adequately provide for operational disruptions by having business continuity plans and frequently reviewing those plans.

Organisational requirements

516 Consolidator/s must have sufficient resources (including financial and technical resources) for the proper performance of their functions. They must also have appropriate governance arrangements and systems and controls in place to manage any conflicts of interest.

Security

517 Consolidator/s should have appropriate measures in place to ensure the integrity and security of data.

Key terms

Term	Meaning in this document
10-second (priority crossing) rule	A now-repealed rule that only permitted a priority crossing to be effected when the second bid or offer was entered into the execution venue at least 10 seconds after the first
ACCC	Australian Competition and Consumer Commission
ADV (average daily volume)	The number of shares traded per day, averaged over a time period (e.g. annual average)
AFS licensee	A person who holds an Australian financial services licence under s913B of the Corporations Act Note: This is a definition contained in s761A of the Corporations Act.
agency	Where a market participant acts on behalf of a client
aggregate consideration	The combined price of a basket (or portfolio) of products acquired and/or sold in a transaction
aggressive liquidity taker	A trader who actively trades on existing bids and offers
algorithm/algorithmic trading	Electronic trading activity whose parameters are set by predetermined rules aimed at delivering specific execution outcomes
allowable tolerance	A permitted margin of difference between the time on an entity's clock and the time on the Universal Time Clock
AOP (automated order processing)	Orders generated by a system
AQUA products	Product quotations on ASX under the AQUA Rule framework
arbitrage	The process of seeking to capture pricing inefficiencies between related products or markets
ASIC	Australian Securities and Investments Commission
ASIC-approved data consolidator	An entity approved by ASIC to consolidate and publish pre-trade and post-trade market data
ASX	The exchange market known as the Australian Securities Exchange
ASX Best	An ASX smart order router which enables ASX participants to route orders to ASX for execution within the expanded ASX execution venue offering
ASX Clear	The ASX clearing facility and central counterparty for cash market products and predominantly equity-related derivatives

Term	Meaning in this document
ASX Group	The ASX group of companies
ASX operating rules	ASX Limited's new operating rules, which replace the pre-existing ASX market rules
ASX Settlement	The ASX settlement system and electronic securities depository for equity and equity-related products
ASX 200	A collective name for the largest 200 shares listed on the ASX by market capitalisation
ASX 24	The exchange market formerly known as the Sydney Futures Exchange (SFE), operated by ASX Limited
ASX Limited	The market operator of ASX
ATS (alternative trading system)	In the US and Canada, an ATS is a facility for bringing together purchasers and sellers of products, but it is not a formal securities exchange
AUSTRAC	Australian Transaction Reports and Analysis Centre
Australian market licence	Australian market licence under s795B of the Corporations Act that authorises a person to operate a financial market
AXE-ECN	AXE-ECN Pty Limited
BATS	Better Alternative Trading System
best bid or offer	The best available buying price or selling price
best execution	Where a market participant achieves the best trading outcome for its client
BIC (Bank Identification Code)	A standard format of bank identifier codes approved by the International Organization for Standardization
bid–ask spread	The difference between the best bid and the best offer
block special crossing	An off-order book crossing which may be agreed at any price, where the consideration is at least $1 million
block trade	A proposed pre-trade transparency exception where the consideration for the trade is not less than $1 million for approximately 25 equity market products and $500,000 for all other equity market products
bps	Basis points
breach reporting obligation	As defined in s912D of the Corporations Act
broker–dealer	A term used in the US and Canada to refer to a company or other organisation that trades products for its own account or on behalf of its customers

Term	Meaning in this document
bundling	The practice of market participants and other service providers providing other services, such as advice, research and analytical tools, in conjunction with trade execution
buy-side	A term referring to advising institutions typically concerned with buying, rather than selling, assets or products. Private equity funds, mutual funds, unit trusts, hedge funds, pension funds and proprietary trading desks are the most common types of buy-side entities
capital formation	A method for increasing the amount of capital owned or under one's control, or any method in utilising or mobilising capital resources for investment purposes
CDI (CHESS Depository Interest)	Non-Australian companies use CDIs as an instrument to support electronic registration, transfer and settlement of their products listed on ASX
CentrePoint	An ASX-operated venue that references the midpoint of the bid–ask spread on the ASX Central Limit Order Book
CESR	Committee of European Securities Regulators
CFTC (Commodity Futures Trading Commission)	An independent agency with the mandate to regulate commodity futures and options markets in the US
Chi-East	A pan-Asian dark pool operated as a joint venture between Chi-X Global and SGX
Chi-X	Chi-X Australia Pty Limited
circuit breaker	A mechanism that pauses trading in a product if it exhibits extreme price movement in a defined period of time. Circuit breakers can either apply to individual products or can be market-wide, based on an index's movement
clearly erroneous trade	A trade that deviates so substantially from current market prices that it is considered to be done in error
CLOB (central limit order book)	A central system of limit orders, where bids and offers are typically matched on price–time priority
CME	Chicago Mercantile Exchange Inc.
co-location	Where participants locate their trading systems with the exchange matching engine in a single data centre
compensation scheme	Compensation arrangements in place under the Corporations Act to meet certain claims arising from dealings between investors and market participants
consolidator	See data consolidator

Term	Meaning in this document
consolidated tape	A combined view of pre-trade and post-trade information from multiple markets and execution venues
continuous disclosure	The timely disclosure of information which may affect product values or influence investment decisions, and information in which product holders, investors and markets have a legitimate interest
Corporations Act	*Corporations Act 2001* (Cth), including regulations made for the purposes of that Act
Corporations Regulations	Corporations Regulations 2001
covered short sale	A short sale relying on an existing securities lending arrangement to have a presently exercisable and unconditional right to vest the products in the buyer at the time of sale
CP 145	ASIC consultation paper *Australian equity market structure: Proposals*, released 4 November 2010
crossing/crossed transaction	A type of order where the broker for a buyer and seller are the same. The broker may be acting on behalf of buying and selling clients, or acting on behalf of a client on one side of the trade and as principal
crossing system	An electronically accessible pool of dark liquidity offered by brokers and third parties that automatically matches client orders together or matches client orders against the broker's own account
dark liquidity/hidden liquidity	Non-pre-trade transparent orders
dark order	An order that is not pre-trade transparent
dark pool	Non-pre-trade transparent electronically accessible pools of liquidity
data centre	A facility used to house computer systems, matching engines, exchange servers, co-location facilities and other computer hardware and software
data consolidator	An entity that combines data from various execution venues to produce a consolidated view of order and/or trading information for use by investors
data feed	An electronic mechanism for investors to receive a stream of information from data sources
DEA (direct electronic access)	Access to markets via the infrastructure of a market participant
DEA channel	An access point to an exchange engine for an entity using DEA

Term	Meaning in this document
depth of book	Where every order for every market participant is displayed. A 'deep book' has many orders at many different price points
ELP (electronic liquidity provider)	Typically, HFTs or algorithmic traders who attempt to profit by providing continuous two-sided quotes for liquid securities on an unofficial basis to capture the bid–ask spread of a product
equity market	The market in which shares are issued and traded, either through exchange markets or OTC markets
equity market products	For the purposes of this consultation paper or report, shares, managed investment schemes and CHESS Depository Interests (CDIs) admitted to quotation on ASX
exchange market	For the purpose of this consultation paper or report, a market that enables trading in listed products, including via a 'central limit order book' Not all exchange markets offer primary listings services
execution quality report	A proposed report by execution venues on liquidity measures, trading statistics and other relevant data
execution venue	An execution venue is a facility, service or location on or through which transactions in equity market products are executed and includes each individual order book maintained by a market operator, a crossing system and a participant executing a client order against its own inventory otherwise than on or through an order book or crossing system
facilitated specified size block special crossing	An existing ASX exception from post-trade reporting permitting a delay for transactions above $15 million, $10 million, $5 million or $2 million, depending on the product
financial market	As defined in s767A of the Corporations Act. It encompasses facilities through which offers to acquire or dispose of financial products are regularly made or accepted
financial product	Generally a facility through which, or through the acquisition of which, a person does one or more of the following: • makes a financial investment (see s763B); • manages financial risk (see s763C); and • makes non-cash payments (see s763D) Note: See Div 3 of Pt 7.1 of the Corporations Act for the exact definition.
FINRA	Financial Industry Regulatory Authority

Term	Meaning in this document
'flash crash'	The 'flash crash' of 6 May 2010 involved an extraordinary rapid decline and recovery in US equities and futures markets triggered by a large sell order in the futures market on a day where the markets were already affected by unsettling political and economic news
fragmentation	The spread of trading and liquidity across multiple execution venues
front-running	The practice of transacting on one's own behalf before implementing a client's instructions
FSG	Financial Services Guide
fundamental investor	A person that buys or sells a security based on an assessment of the intrinsic value of the security
HFT (high-frequency trading)	While there is not a commonly agreed definition of HFT, we characterise it in this consultation paper and the report as: • the use of high-speed computer programs to generate, route and execute orders; • the generation of large numbers of orders, many of which are cancelled rapidly; and • typically holding positions for very short time horizons and ending the day with a zero position
HFTs	High-frequency traders
hidden order	An undisclosed order which does not have time priority
high-speed trading	A specialised form of algorithmic trading characterised by the use of high-speed computer programs
HIN	CHESS Holder Identification Number
IIROC	Investment Industry Regulatory Organization of Canada
iceberg order	An order that only exposes a small amount of the total order volume, with the remainder of the volume undisclosed
indirect market participant	A broker that is not itself a market participant, but that accesses the market through a market participant
inside information	As defined in s1042A of the Corporations Act
Instinet	Instinet Incorporated, the parent company of the Instinet group of companies
internalisation	Trading a client order against a market participant's own account
investment firm	An entity defined under MiFID whose regular occupation is to provide investment services and/or perform investment activities on a professional basis
IOSCO	International Organization of Securities Commissions

Term	Meaning in this document
IP address	Internet protocol address
IRESS	IRESS Market Technology Limited
issuer	A company that has issued shares
ITG POSIT	A buy-side crossing pool operated by ITG
large trader reporting system	A proposed US reporting system that requires traders who engage in substantial levels of trading activity to identify themselves to the SEC through a filing with the Commission. A large trader does transactions in exchange-listed securities equal to or exceeding two million shares or $20 million during any day, or 20 million shares or $200 million during any calendar month
latency	An expression of how much time it takes for data to get from one point to another
limit order	An order for a specified quantity of a product at a specified price or better
liquidity	The ability to enter and exit positions with a limited impact on price
Liquidnet	Liquidnet Australia Pty Limited
LSE	London Stock Exchange
maker–taker pricing	A pricing scheme used by some execution venues which rewards price makers (limit orders) with a rebate, while price takers (market orders) pay a fee
managed investment scheme	As defined in s9 of the Corporations Act
market impact	The cost incurred when the price of execution is different from the target price
market integrity rules	Rules made by ASIC, under s798G of the Corporations Act, for trading on domestic licensed markets
market licence	An Australian market licence
market maker	An entity that provides a required amount of liquidity to a market, and takes the other side of trades when there are short-term buy and sell imbalances in customer orders in return for rebates and/or various informational and trade execution advantages
market manipulation	As defined in Pt 7.10 of the Corporations Act
market operator	A holder of an Australian market licence
market order	An order at the best price currently available
market participant	As defined in s761A of the Corporations Act

Term	Meaning in this document
MAS	Monetary Authority of Singapore
MiFID	Markets in Financial Instruments Directive
MTF (multilateral trading facility)	A multilateral system operating in the European Economic Area that is operated by an investment firm or a market operator, which brings together multiple third-party buying and selling interests in financial instruments—in the system and in accordance with non-discretionary rules—in a way that results in a contract in accordance with the provisions of Title II of the European Markets in Financial Instruments Directive
naked short sale	The practice of short selling securities without a securities lending arrangement
Nasdaq OMX	National Association of Securities Dealers Automated Quotations—a US securities exchange
NMI	National Measurement Institute
non-professional client	A person who is not a professional investor
NTP	Network Time Protocol
NYSE Euronext	New York Stock Exchange—a US securities exchange
off-order book trading	Trading that takes place away from a CLOB and that is not pre-trade transparent. It is often referred to as 'dark liquidity' or 'upstairs trading'. It includes bilateral OTC trades and trades resulting from a broker matching client orders or matching a client order against the participant's own account as principal. When this type of trading is done in an automated way and is part of a pool of liquidity, it is referred to as a 'dark pool'
opening price auction	A market phase which occurs before a normal trading session where opening prices are established through an electronic auction. Orders can be entered during the auction but no matching occurs
operating rules	As defined in s761A of the Corporations Act
order book	A list of unexecuted orders available to be matched for each product used by execution venues to record the interest of buyers and sellers in a financial instrument
order-driven market	An auction market in which prices are determined by the publication of orders to buy or sell shares
origin-of-order information	A type of order category that identifies trading capacity and, if relevant, the type of client
OTC	Over-the-counter

Term	Meaning in this document
passive market maker	A trader who uses HFT strategies involving the automated generation of non-marketable resting orders providing liquidity to the market at specified prices
pegged order	A specified quantity of a product set to track the best bid and offer on the primary market
PIN	UBS's Price Improvement Network
portfolio trade	A trade that includes at least 10 purchases or sales, the firm acts as agent for both the buyer and seller of the portfolio or as principal buys from or sells to the client, and the consideration of each is not less than $200,000 and the aggregate consideration is not less than $5 million
post-trade transparency	Information on executed trades made publicly available after trades occur
pre-trade transparency	Information on bids and offers being made publicly available before trades occur (i.e. displayed liquidity)
price formation	The process determining price for a listed product through the bid and offer trading process of a market
price sensitive information	Information about a company that will have, or can be expected to have, an impact on the price of that company's products
price–time priority	A method for determining how orders are prioritised for execution. Orders are first ranked according to their price; orders of the same price are then ranked depending on when they were entered
priority crossing	A type of on-market ASX crossing that is transacted at or within the spread with time priority
professional investor	As defined in s9 of the Corporations Act
proprietary trader	A trader who is trading on their own behalf
PureMatch	A high-speed ASX execution venue for ASX 200 shares aimed at HFTs which will run parallel to ASX's CLOB
quote-driven market	An electronic exchange system in which prices are determined from quotations made by market makers or dealers
Reg NMS (Regulation National Market System)	New substantive rules designed to modernise and strengthen the regulatory structure of the US equities markets

Term	Meaning in this document
Reg ATS (Regulation Alternative Trading System)	Section 242.3 of US 17 Code of Federal Regulation. It governs the operation of alternative trading systems in the US
REP 215	ASIC report *Australian equity market structure*, released 4 November 2010
RG 214	An ASIC regulatory guide (in this example numbered 214)
Rule 605/606	Execution quality and order routing statistical reports which are required to be made public periodically by market centres and broker–dealers
S&P/ASX 200 Index	An index of the largest 200 shares listed on ASX by market capitalisation
s912 (for example)	A section of the Corporations Act (in this example numbered 912), unless otherwise specified
sell-side	A term that describes firms that sell investment services to the buy-side, or corporate entities, including broking–dealing, investment banking, advisory functions and investment research
SEC	US Securities and Exchange Commission
settlement	The exchange of payment for purchased securities
SFE (Sydney Futures Exchange)	The market formerly known as Sydney Futures Exchange (now ASX 24)
SGX	Singapore Exchange Ltd
short sale transaction	The practice of selling financial products that are not owned by the seller, with a view to repurchasing them later at a lower price. Short sales can be naked or covered
Sigma X	A dark pool crossing system and ATS that provides execution and liquidity to Goldman Sachs' clients on a global basis
SOR (smart order router)	An automated process of scanning various execution venues to determine which venue will deliver the best outcome on the basis of predetermined parameters
spread	The difference between the best bid and offer prices
SRN	Security Reference Number
SSCB	Single stock circuit breaker
stub	The residual volume from a partly filled order

Term	Meaning in this document
suspicious activity reporting	A requirement for a market participant to notify ASIC if it has reasonable grounds to suspect that a person is trading with insider information, engaging in manipulative trading or front-running
synchronised clock	A system time clock that matches a reference source clock
TAS	ASX Trade Acceptance Service
tick size	The minimum amount by which share prices are allowed to vary
top-of-book	The single best bid and offer
total consideration	The total price and execution costs incurred, including market fees and clearing and settlement fees
TradeMatch	A new ASX low-latency execution venue offering trade execution services for all ASX-listed products
trade-through	A model and rule that embeds price–time priority across multiple pre-trade transparent venues to protect displayed bids and offers from being bypassed
trade confirmation	A legal document provided to clients which sets out the terms of an executed trade
trade report	An electronic message created when a trade is executed, detailing the terms of the trade
trading halt	A temporary pause in the trading of a product for a market-integrity-related reason, such as when an announcement of price sensitive information is pending
two-sided quote	A quote to buy and sell
UMIR	Canadian Universal Market Integrity Rules
undisclosed order	A non-pre-trade transparent order
unfiltered access	A form of DEA where the market participant that is providing the market access does not have filters in place
Universal Time Clock	A clock that is referenced to UTC(AUS)
UTC(AUS)	Coordinated Universal Time for Australia
volatility	Fluctuation in a product's price
volatility control/ collar	A set price limit whereby a product can only trade at or above (or at or below) that level for a period of time. These controls can limit the disruptive effect of anomalous trades
VolumeMatch	An ASX-operated venue that facilitates the matching of anonymous large orders with reference to the last price on the ASX CLOB