



13 March 2020

Department of the Senate
PO Box 6100
Parliament House
Canberra ACT 2600

By email: fintech.sen@aph.gov.au

Dear Sir/Madam

Submission by Chi-X Australia to the Senate Select Committee on Financial Technology and Regulatory Technology (the Committee)

Chi-X Australia Pty Ltd (Chi-X) is grateful for the opportunity of making a submission to the Committee.

Chi-X Australia exists only because of a very rare case of industry wide and bipartisan political support to address the monopoly rents charged by ASX.

As a result, the Chi-X experience provides objective and substantial evidence on the introduction of 'start up' competition in a financial technology environment.

In particular, using the language in the Committee's formal terms of reference, the Chi-X experience outlined in this submission contains evidence on:

- (a) the size and scope of the benefits for Australian consumers and business arising from the introduction of competition between financial technology providers in financial market infrastructure (FMI) services (see sections 2 and 3 of **attachment one**);
- (b) barriers to the uptake of new technologies in financial market infrastructure (see sections 4 and 5 of **attachment one**);
- (c) competition reform and benchmarking of comparable global regimes (see sections 6 and 7 of **attachment one**).

In summary, Chi-X has:

- delivered millions of dollars of benefits for Australian consumers and businesses¹;

¹ See for example: (a) the CMCRC study [How beneficial has Competition been for the Australian equity marketplace?](http://www.cmcrc.com/documents/1372142696hascompetitionbeenbeneficialforaustralianmarketplace.pdf), which estimated the welfare benefits from the first year of competition alone as \$36-220million, retrieved on 12 February 2016 from: <http://www.cmcrc.com/documents/1372142696hascompetitionbeenbeneficialforaustralianmarketplace.pdf> and (b) a study by the Strategic Intelligence Unit at ASIC, which concluded that from the commencement of competition in market infrastructure to January 2013, the benefits of competition may have been worth up to \$300million per year – see page 32 of the Treasury Market Supervision Cost Recovery Impact Statement at http://www.treasury.gov.au/~media/Treasury/Consultations%20and%20Reviews/Consultations/2013/ASIC%20Market%20Supervision%20Cost%20Recovery/Key%20Documents/PDF/Consultation_draft_CRIS.ashx



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- encountered and continues to encounter numerous barriers in its efforts to compete with an entity that has hundreds of times our staff, profits and revenues;
 - sought to highlight and introduce to Australia, the benefits of global benchmark regulatory frameworks that have delivered the benefits of competition in our area of financial technology.

Attachment one to this submission outlines some of the evidence on these matters and is segmented as follows:

1. A brief history of Chi-X as a financial technology start up that has disrupted local and global financial markets;
2. Why Chi-X Exists in Australia;
3. The Impact of Chi-X in those Areas in which it has been able to Compete;
4. Barriers to Entry – Market Launch;
5. Ongoing Barriers;
6. Possible Global Lessons;
7. What has Improved.

I hope this submission is of assistance in your important work, please do not hesitate to contact us if you have any queries.

Yours sincerely

Chi-X Australia Pty Ltd



ATTACHMENT ONE

1. A Brief History of Chi-X

1.1 The Chi-X Group

- 1.1.1 Chi-X first launched an alternate trading platform in Europe in 2007, when it was owned by Instinet, a pioneering electronic trading firm based in the US. Instinet had first launched an electronic trading platform in December 1969.
- 1.1.2 Chi-X Europe was the first multilateral trading facility to launch in Europe in anticipation of the Markets in Financial Instruments Directive (MiFID), which came into force in November 2007. A main purpose of MiFID was to facilitate competition between national stock exchanges and alternative trading platforms as part of a concerted policy effort to enhance the single European market for financial services.
- 1.1.3 Following its launch, Chi-X Europe steadily increased its market share and regularly introduced new products, such as the Chi-Delta dark book, introduced in April 2009 and which is highly likely to have inspired the ASX CentrePoint product, which was introduced by ASX in Australia in between the date Chi-X first applied for a market licence and when it was finally obtained in May 2011.
- 1.1.4 By mid-2010, Chi-X Europe, had reached a pan-European equities market share of nearly 20%, and in 2011 it was acquired by the BATS Global Markets, a global stock exchange operator.

1.2 Chi-X Australia

- 1.2.1 Chi-X Australia first lodged an application for an Australian market licence in August 2008. The licence was finally granted in May 2011 and trading commenced on 31 October of that year.
- 1.2.2 Chi-X launched with an initial trading community of 22 trading participants and trading in six ASX listed securities. It now has nearly 50 participants and trades over 2000 ASX listed securities and hundreds of financial products that are uniquely quoted and traded on Chi-X.
- 1.2.3 The daily trading record is \$3.5billion, and a total market share of approximately 20% is regularly achieved.
- 1.2.4 However, Chi-X Australia was a lot slower than almost all its global peers to generate a profit, which was a result of a number of factors, including:
 - (a) The ability to charge fees was restricted by ASX price cuts that saw the annual charges on some products with which Chi-X competed, reduced from over \$500,000 to a maximum of \$12,000 a year, restricting Chi-X to the same \$12,000 charge;

- (b) ASIC cost recovery fees and ASX Clearing fees charged to Chi-X are some of the most expensive in the world (they were many millions of dollars a year when Chi-X launched).

2. Why Chi-X Exists in Australia

2.1.1 The Johnson report noted:

The Forum received a good deal of feedback from industry concerning the lack of equity trading platform development [at ASX] (see Appendix 4) and innovation.

...

The Forum's general position with respect to exchange traded products — as with all other aspects of the financial markets — is that openness to new entrants is an essential condition for competition, efficiency and innovation. Evidence from other countries where traditional exchanges are now competing with new trading platforms suggests that competition has resulted in innovation and generally lower transaction costs.

The Forum thus strongly supports the Government's announcement and the introduction of competition between market operators.²

2.1.2 The RBA has also noted the age of the current CHES system in its operational risk assessments of ASX Clear and ASX Settlement, stating in 2016/2017 assessment:

*A consequence of the power outage was **that it made a component of the CHES system inoperable at the back-up site. A contributing factor was the age of the component. As a result, for a period of a few weeks following the incident, ASX's ability to recover from an operational disruption to its CHES operations was limited.***³ [my emphasis]

2.1.3 RBA also stated in the 2015-2016 assessment of ASX Clear:

*Another important component of the technology transformation project is the replacement of the CHES clearing and settlement system. **This replacement is an important element of ensuring that ASX's core clearing and settlement infrastructure for cash equities meets international best practice, and that its performance, resilience, security and functionality continue to meet the needs of its users...** ASX is also encouraged to invest in appropriate contingency arrangements, to*

² See <http://www.fex.com.au/media/AFCF.pdf>, retrieved on 13 March 2020.

³ See <https://www.rba.gov.au/payments-and-infrastructure/financial-market-infrastructure/clearing-and-settlement-facilities/assessments/2016-2017/material-developments.html>, retrieved on 13 March 2019.

ensure the timely implementation of an alternative CHES replacement system should the decision be taken not to proceed with the DLT solution⁴.

- 2.1.4 Market Structure Partners (MSP), an independent global consultant on market infrastructure, remarked in 2014 that

MSP understands that the Australian cash equity clearing infrastructure may have suffered from a period of under-investment. The ASX has publically stated that it would consider fee reductions only if it can secure a longer-term monopoly on clearing - this is the classic argument of a monopolist where customers are expected to pay for any improvements and not the shareholders⁵.

- 2.1.5 The potential innovations posed by the CHES replacement project, should be welcomed, although they do pose multiple regulatory challenges beyond the scope of this submission. However, history records that the age of the existing CHES systems was a significant factor in the need for the current ASX investment in the CHES replacement project⁶.
- 2.1.6 The ability of competition to address the high prices and poor platform development at the incumbent market operator, were the drivers for the legislative and regulatory reforms, passed on a politically bipartisan basis, that enabled Chi-X to obtain an Australian Market Licence in May 2011.
- 2.1.7 Queries over the effectiveness of the regulatory framework for financial technology in financial market infrastructure persist today, particularly in the critical infrastructure areas of clearing and settlement. In 2015, the Council of Financial Regulators recommended a new framework for ASX Clear and ASX Settlement, that may assist in addressing some of these queries but the recommended framework is yet to be legislated. ASX Consultation Papers on the CHES replacement project continue to indicate it prioritises clearing and settlement for ASX issuers over those of Chi-X. Chi-X has been refused access to a node in the replacement project and the recent CP indicates the priority given to the mFund platform, with which Chi-X competes for issuers⁷.

⁴ See page numbered 57 at <https://www.rba.gov.au/payments-and-infrastructure/financial-market-infrastructure/clearing-and-settlement-facilities/assessments/2015-2016/pdf/report-2015-2016.pdf>, retrieved on 13 March 2020.

⁵ See https://treasury.gov.au/sites/default/files/2019-03/C2015-007_MarketStructurePartners.pdf, retrieved on 13 March 2020

⁶ Australia also lagged global standards in the introduction of some of the basic risk measures in the clearing of cash equities: for example, margins were used in other global jurisdictions to manage risk in cash equities clearing since at least 1995, but were not collected on this basis in Australia until June 2013.

⁷ See pages 14 to 16 of ASX CP: CHES Replacement – Tranche 2 Rule Amendments Consultation Paper at <https://www.asx.com.au/images/settlement/Tranche2ConsultationPaperandAttachments.PDF>, retrieved on 13 March 2020.



3. The Impact of Chi-X in those Areas in which it has been able to Compete

3.1.1 In 2013, after it had been operating for a short period, Chi-X compiled a comparison of ASX fees in areas where Chi-X competed and ASX fees in those areas where it did not compete. The results are reproduced in **appendix one** and provide overwhelming evidence of the economic benefits of Chi-X launching an alternative market to that offered by ASX. All areas in which Chi-X competes has been subject to fee decreases while all areas in which Chi-X did not compete were subject to ASX price rises.

3.1.2 The benefits of the competition introduced by Chi-X are not limited to economic benefits. The ASX Chair stated shortly after Chi-X had launched:

“ASX’s response to competition has been substantial and positive. The company cut its fees, introduced new products and invested in its Technical Services business”

3.1.3 The benefits of competition are recognised:

(a) globally, with the former SGX CEO stating in 2014: *“If we really want to be a [major] financial centre we need to see more exchanges in town”*

(b) politically, with the then Minister for Revenue and Financial Services stating in March 2018: *“It is my belief that ultimately it is competition, not regulation, that is the best means of ensuring consumers get value for money in financial services... Consumers and financial services providers, benefit from a more competitive financial system”*

3.1.4 Chi-X is of the view that, on conservative estimates, the introduction of Chi-X as a competitor to the ASX has resulted in Australian participants and issuers saving over \$200million in the lower fees charged to participants by ASX and Chi-X, and nearly \$15million in the lower fees charged to issuers by ASX and Chi-X.

4. Barriers to Entry – Market Launch

4.1.1 When Chi-X first sought to launch a market, the barriers to entry were numerous and included:

(a) regulatory hurdles – it took a long time for the Chi-X licence to be granted and in between the date of its first application and final market launch, ASX launched products that were very similar to those launched by Chi-X Europe (the Chi-Delta product for example);

(b) the required capital investment for many years and which was a contributing factor in loss making operations for many years;

(c) the vertically integrated operation of the ASX which:

- (i) initially saw the same ASX employees responsible for providing critical ASX services to Chi-X (eg clearing of new product types) also being responsible for the launch of ASX products that competed with those same Chi-X products;
- (ii) resulted in bespoke and proprietary ASX technology paradigms dominating the technology build at Australian stock brokers and which, as they cannot be replicated or used by competing markets, to this day create significant and enduring barriers to entry on multiple fronts (contrary to almost all other global market operators, ASX technology standards were not aligned with global technology applied on an industry wide basis to enable scalable connectivity and other basic technology functions);
- (iii) enabled ASX to decrease fees in areas it was subject to competition from CXA while increasing fees in other areas – see **appendix one**.

4.1.2 The problems raised by the vertical integration of ASX have been noted by the International Monetary Fund, which has remarked:

...as a result of the group-wide risk management approach and the sharing of services and staff provided by ASX Operations Pty Limited to the CCPs, each CCP does not have its own dedicated staffing, including risk management staffing. **ASX should consider establishing CCP specific internal risk committees, dedicated CCP-specific risk management and staffing, risk management systems, and resolution-friendly shared services agreements that account for intragroup inter-dependencies.** An option could include a separate risk committee for each of the CCPs with a dedicated ERM for each of the CCPs, and inclusion of critical staff and systems within each of the CCP legal entities. **Such a separation would also make it simpler when considering safe and effective competition issues in the equity market.** [my emphasis]

4.1.3 These are significant comments, from a respected international body, on the benefits of structurally separating the clearing and settlement functions at ASX.

5. Ongoing Barriers to Entry

5.1.1 Since its market launch, Chi-X has sought to build its business and also enter new markets. It has experienced significant barriers when attempting to do so.

5.1.2 The most significant impediment to competing with the ASX is the barrier to entry created by ASX's bespoke technology and related systems. This has resulted in Chi-X customers being 'captive' to ASX as the dominant/sole provider of multiple critical and important infrastructure services (eg settlement) and products (eg data). Chi-X customers must therefore have technology that meets the requirements of ASX's bespoke technology systems and products. This technology is not sufficiently flexible to use Chi-X products and services without significant additional capital expenditure by potential Chi-X customers.

5.1.3 This is why:

- (a) The extreme vertical integration at ASX, where technology paradigms are dictated by ASX group needs, and are among the most anti-competitive measures in financial market technology for any global market, needs to be addressed to facilitate innovation and competition in the Australian market;
- (b) A robust and rigorous regulatory framework whereby competition outcomes are prioritised is absolutely essential for Australia to facilitate financial technology innovation in some critical areas;
- (c) Past performance may not guarantee future outcomes but it can indicate what may occur if the same circumstances arise, and past performance in financial market infrastructure indicates that unless a regulatory framework deliberately targets the facilitation of pro-competition outcomes, an incumbent monopoly will have an overwhelming incentive to charge monopoly rents, with high prices and low quality services being imposed on the Australian market to the detriment of the nation and investors.

6. Global Lessons

6.1.1 In other financial centres, some of the anti-competition outcomes and barriers to entry experienced in Australia have been addressed, including by:

- (a) Enhancing best execution in Europe to provide more teeth on the obligation of brokers to connect to platforms that provide best execution;
- (b) Introducing wide ranging reforms that may impose costs but are directed at delivering the significant and enduring benefits of competition. For example, the MiFID reforms were wide ranging and by requiring technology overhauls that were not driven by a single incumbent monopoly with proprietary technology paradigms, facilitated competition between technology solutions to deliver cost efficient innovations for the wider market;
- (c) A trade through obligation in the US and Canada, that require orders to be passed to a market which provide the best price and so uses technology to facilitate the best price outcome for investors.

6.1.2 Chi-X is of the view that there are significant lessons to be learnt from overseas jurisdictions. The offshore regulatory frameworks are almost certainly not suitable for a “copy and paste” into an Australian environment, but they do emphasise that Australia does not have to be satisfied with:

- (a) Technology barriers that overwhelmingly favour dominant market providers to diminish the opportunities for innovation and competition;

- (b) A lack of transparency on what best execution policies are delivering and how much in aggregate retail investors at some stock brokers are missing out on every year simply because those brokers do not, and cannot, get the best available prices for those investors as they are only available on Chi-X; and
- (c) Some of the world most expensive fees for financial market infrastructure and services which are not subject to competition, including:
 - (i) clearing and settlement:- *“Although there is an argument that Australia cannot achieve similar economies of scale to Europe, even when compared with peers of a similar value cleared to the Australian market, such as SIX Xclear, Eurex, Canada and HKSCC, the average cost of clearing in Australia is considerably higher”⁸.*
 - (ii) Listing – *“Australia’s stock market operator has raised listing fees twice in the past two years, and Morgan Stanley expects more fee hikes to come despite them already being high by global standards”⁹.*

7. What Has Improved

- 7.1.1 As Chi-X has grown to become an established part of the market infrastructure landscape in Australia, the conditions for competing have improved. Chi-X is of the view that two factors in particular are relevant to consider in this regard, and which may be of particular relevance for the Committee to consider in its potential application to other financial technology areas.
- 7.1.2 Firstly, Australian regulators have each become better acquainted with the benefits of competition and how to consider competition outcomes in policy and other regulatory decisions. This does not mean they are pro-Chi-X at the expense of an incumbent, but it does mean that they are increasingly conscious of favouring policy settings that do not damage competition for no discernible benefit. It may simply be a product of local regulators becoming more familiar with the costs and benefits of competition in financial market infrastructure in an Australian context.
- 7.1.3 Secondly, some ASX service teams have taken a very customer focused approach to Chi-X services so that there is no fear of ASX simply replicating Chi-X products and charging minimum fees for them to diminish the business model of Chi-X. This may sound minor, but it is important in Chi-X having the confidence to engage with a company that, while being a critical services provider necessary for the success of the Chi-X market, is also a competitor that is seeking to put Chi-X out of business.

⁸ See page 7 of https://treasury.gov.au/sites/default/files/2019-03/C2015-007_MarketStructurePartners.pdf.

⁹ See <https://www.businessinsider.com.au/morgan-stanley-the-asx-will-keep-raising-fees-thanks-to-its-quasi-monopoly-status-2014-2>, retrieved on 13 March 2020.



APPENDIX ONE – CXA-ASX FEE COMPARISON

The table in this appendix highlights fee increases in **red** and fee decreases in **green**. Emboldened entries that have been italicised represent fees charged in areas where ASX and Chi-X compete.

Clearing And Settlement Fees			
Fee	2006	2011	2012
Clearing Fee	0.25bps	0.25bps	0.25bps
Clearing Fees Structured Products and Warrants	n/a	0.35bps	0.35bps
Holder Maintenance – Direct Holding	0.20 bps	0.20bps	0.30 bps
Index LEPOs - Standard Registration Fee	n/a	0.35 bps	0.45 bps
Index LEPOS – market maker registration fee	n/a	0.07 - 0.35 bps	0.10 - 0.35 bps
CHESS Holding Statements	\$1.00 per statement	\$1.00 per statement	\$1.10 per statement
CHESS and Sub-register transfer & conversion	\$0.20	\$0.25	\$0.30
CHESS Notification of Holding Details Update	\$0.20	\$0.20	\$0.30
CHESS Notification of Tax File Update	\$0.20	\$0.20	\$0.30
CHESS Holding Adjustments	\$0.20	\$0.25	\$0.30
Direct Holder/Offer Acceptance	\$0.20	\$0.20	\$0.30
Offer Transfer Acceptance	\$0.20	\$0.20	\$0.30

Connectivity Fees		
Fee	2011	2013
<i>Liquidity Cross Connect (LCC) – ASX Trade</i>	<i>\$1,100 per month</i>	<i>\$1,175 per month</i>
ASX Clear Connection	\$600 (to \$800 on 1 July 2012) per month	\$1,000 per month
<i>ASX Trader Workstation – OI Session Group</i>	<i>No such fee</i>	<i>\$600 per participant id on a monthly basis</i>
ComNews Access (access to ASX Company Announcements Platform)	\$850	\$1,000
<p>Note that a number of connectivity fees relate to services that have developed with the onset of competition. Caution has therefore been exercised in what is included in connectivity fee increases to ensure that a misleading appearance is not created with respect to increases in these costs.</p>		



Market Services			
Fee	2006	2012	2013
Participant Application Fee (ASX Market)	\$250,000	\$250,000	\$50,000
Participant Application Fee – Agency Broker	\$100,000	\$100,000	\$25,000
Participant Application Fee – General Clearing Participant	\$200,000	\$200,000	\$50,000
Participant Application Fee – Direct Clearing Participant	\$200,000	\$200,000	\$25,000
ASX Settlement Participant Application Fee – Account Participant Application Fee	\$2,500	\$5,000	\$5,000
ASX Settlement Participant Application Fee – Specialist Participant Application Fee	\$5,000	\$5,000	\$5,000
ASX Settlement Participant Application Fee – General Participant Application Fee	Nil ¹⁰	\$10,000	\$10,000
Equities Trade Fee	0.28bps	0.15bps	0.15bps
ETF Special Trade Fee	0.28bps	0.15bps	0.15bps
ASX Trade Reporting Facility Off-mkt (Capped) Equities Fee	0.075bps	0.04bps with a \$8,000 cap from 05/12 and a \$6,000 cap from (10/12)	0.04bps with a \$1,000 cap from 1 April 2013
ASX NBBO Crossing Trade Reporting Facility Equities Fee	-	0.08bps uncapped	0.04bps with a \$1,000 cap from 1 April 2013
ETF Special Trade Fee	0.28bps	0.15bps	0.15bps
Warrants/Structured Product/Interest Rate Trade fees	0.28bps	0.31bps	0.31bps
NB warrants and structured product application fees are difficult to analyse as the structure of the fees changed between 2006 and 2011.			
Turnover Fees (warrants and structured products)	0.055% of premium traded capped at \$5,500 per warrant series for each 12 months	0.10% of premium traded capped at \$10,000 per warrant series for each 12 months	0.10% of premium traded capped at \$10,000 per warrant series for each 12 months

¹⁰ There was no separate fee, only a \$200,000 application fee to become a clearing participant, which remained the same 2006-2011 but decreased to \$50,000 in 2012.



ASX 24 and ASX Clear (Futures)		
Fee	2011	July 2013
SPI 200 Index Options	\$0.60 per side	\$0.80 per side
REC futures	\$1.00 per side	\$10.00 per side

ASX Austraclear		
Fee	2011	July 2013
Fixed Income Securities Bonds - FIS Settlement	\$11.00 per side	\$12.00 per side
FIS Market Repo	\$11.00 per side	\$12.00 per side
DSS Settlement	\$11.00 per side	\$12.00 per side
DSS Market Repo	\$11.00 per side	\$12.00 per side
Depository Holdings – DSS Electronic Portfolio Holdings	\$0.80 per \$ Million per month	\$0.85 per \$ Million per month
Depository Holdings – FIS	\$0.80 per \$ Million per month	\$0.85 per \$ Million per month



Listing Fee Tables

Note that in each of the following tables all figures are dollars except those expressed to be a percentage. The fee changes were introduced in the months specified.

Initial application fee

Value of securities for which quotation is sought	Applicable Listing Fees			
	September 2006	March 2011	May 2012	July 2013
3m	13,310	25,000	25,000	26,250
3m to 10m	13,310 + 0.2671429%	25,000 + 0.2671429% on excess over \$3m	25,000 + 0.46% on excess over \$3m	26,250 + 0.483% on excess over \$3m
10,000,0001 to 50m	32,010 + 0.07975%	43,700 + 0.07975% on excess over 10m	57,200 + 0.09% on excess over 10m	60,060 + 0.09450% on excess over 10m
50,000,001 to 100m	63,910 + 0.04004%	75,600 + 0.04004% on excess over 50m	93,200 + 0.052% on excess over 50m	97,860 + 0.05460% on excess over 50m
100,000,001 to 1,000m	83,930 + 0.02262333%	n/a	n/a	n/a
100,000,001 to 500m	n/a	95,620 + 0.03% on excess over \$100m	119,200 + 0.037% on excess over 100m	125,160 + 0.03885% on excess over 100m
500,000,001m to 1,000m	n/a	215,620 + 0.025% on excess over 500m	267,200 + 0.032% on excess over 500m	280,560 + 0.03360% on excess over \$500m
Over \$1,000m	287,540 + 0.01331%	340,620 + 0.018% on excess over 100m	427,200 + 0.027% on excess over 100m	448,560 + 0.02835% on excess over 100m



Annual Listing Fee

Value of securities quote	fee			
	September 2006	March 2011	May 2012	July 2013
3m	7,450	9,990	9,990	10,500
3m to 10m	7,450 + 0.106401448%	9,990 + 0.1425% on excess over \$3m	9,990 + 0.149625% on excess over \$3m	10,500 + 0.157200% on excess over 3m
10,000,0001 to 100m	14,900 + 0.011531668	19,970 + 0.0154% on excess over 10m	20,470 + 0.017325% on excess over 10m	21,504 + 0.018200% on excess over 10m
100,000,001 to 1,000m	25,270 + 0.002143532	33,380 + 0.002865% on excess over \$100m	36,070 + 0.003438% on excess over \$100m	37,884 + 0.003612% on excess over \$100m
\$1,000,000,001 to 10,000m	44,570+ 0.000657986	59,590 + 0.00088% on excess over \$100m	67,020 + 0.001144% on excess over \$100m	70,392 + 0.001202% on excess over \$100m
Over 10,000,000,001	103,790 + 0.000067155 capped at \$147,500	138,790 + 0.00009% capped at \$197,000	169,980 + 0.000126% capped at \$300,000	178,572 + 0.000300% capped at \$350,000



Fee for quotation of additional equity and debt securities quoted to facilitate trading

Value of securities for which quotation is sought	fee			
	September 2006	March 2011	May 2012	July 2013
Up to 100,000	1,200	1,500	1,500	1,575
100,001 to 500,000	1,200 + 0.4250% on excess over 500,000	1,500 + 0.4250% on excess over 100,000	1,500 + 0.425% on excess over 100,000	1,575 + 0.44625% on excess over 100,000
500,000 to 2.5m	2,900 + 0.2500% on excess over 2.5m	3,200 + 0.25% on excess over 500,001m	3,200 + 0.25% on excess over 500,001m	3,360 + 0.26250% on excess over 500,000
2,500,001 to 10m	7,900 + 0.1180% on excess over 2.5m	8,200 + 0.0.13% on excess over 2.5m	8,200 + 0.0.13% on excess over 2.5m	8,610 + 0.13700% on excess over 2.5m
\$10,000,001 to 50m	16,750 + 0.0330% on excess over 10m	n/a	n/a	n/a
10,000,001 to 20m	n/a	17,950 + 0.05% on excess over 10m	17,950 + 0.063% on excess over 10m	18,885 + 0.06615% on excess over 10m
20,000,001 to 50m	n/a	22,950 + 0.04% on excess over 20m	24,250 + 0.053% on excess over 50m	25,500 + 0.05565% on excess over 20m
\$50,000,001 to 100m	29,950 + 0.0170% on excess over 50m	34,950 + 0.03% on excess over 50m	40,150 + 0.043% on excess over 50m	42,195 + 0.4515% on excess over 50m
Over 100m	38,450 + 0.0130% on excess over 100m	n/a	n/a	n/a
100,000,001 to 500m	n/a	49,950 + 0.025% on excess over 100m	61,650 + 0.038% on excess over 100m	64,770 + 0.03990% on excess over 100m
Over 500m	n/a	149,950 + 0.02% on excess over 500m	213,650 + 0.033% on excess over 500m	224,370 + 0.03465% on excess over 500m