

# COMPUTERS & LAW

JOURNAL FOR THE AUSTRALIAN AND NEW ZEALAND SOCIETIES FOR COMPUTERS AND THE LAW

Print Post --- PP233867/00008

Editors: Brendan Scott, Lesley Sutton and Kent Davey Number 40

ISSN 08117225 July 2000

## Global Online Trading, ECNs & ATSs: Will Asian-Pacific Markets follow the US in the New Millennium?

Brent Fisse, Lori Semaan & Michael Reede, Gilbert & Tobin

Following are excerpts of an executive summary of a report entitled "Global Online Trading, ECNs and ATSs: Will Asian Pacific Markets Follow the United States in the next Millenium," prepared by Gilbert & Tobin, a law firm specializing in e-commerce in Asia-Pacific. Gilbert & Tobin has a practice interest in the regulatoryeconomic implications of online trading in Asia-Pacific. The full report can be downloaded from Gilbert & Tobin's website: www.gtlaw.com.au

"In a decade or two we will have one global Exchange and it will be in the ether," is one of the bolder predictions of the future. Indeed, the Internet is the future of the financial markets with information as its driver. Never before has the investor had access to so much information and the ability to act instantly on it from anywhere in the world. This phenomenon is quickly shaping the future 24-hour electronic market, vaulted by the development advanced

telecommunications networks, such as ATSs (Alternative Trading Systems) **ECNs** (Electronic and Communication Networks). The surviving market participants will be adopt who Internet technologies to extend trading hours, globalise trading, lower trading costs and provide instant price discovery trade execution. fundamental question, however, is: which market participants are more equipped to do this?

Continued on page 3



In	this	issue

Š	Glo	bal	On	iine	TIE	idin	g, t	:CN	IS 8	ķΑ	FS:	. W	III A	Sia	ar)•
ļ	Pa	cific	. N	tark	et	s fo	ollo	w t	he	U	SI	n: ti	10	N	ew
. 1	8		A 10 19	n?	. 2002	₩.**		Sec.				das:	91	David B	
×Ν	S	10 NO. 100	833 e.	- iss	· wieki	91.0200	Ç,		200	0 1	Hi.	100	0	ొ.	40
×	wy	u,	щ,	100	<b>,</b> ,		· C	ma	au.	× 1	41114	(CC)	1.70	70	44

From the Editors' Desk	

- Precontractual Negotiations for Computer Hard-by Catherine Rowe
- Application Services—A New Playing Field, 12 by Michael Robertson & Kim Gordon

	10	œ.	λÁ		·	· ^ .				9.75		Z 1.	2400	.530	112.	0. 9	č.	2005	V >	·:.:	- 1			. 4	··.	XX 5 ·		. :	·	× 3	999.	
	TO:	00		×.	<b>X</b> 4	-	2.3	27.			:	Mari	•		10.0			100	430	200		╸	ä.	22	32.5	12.0	K.S	A.X		4.0	٠.	×
٠.	.80	-2				-	ο.	**	1117	en	72	111	NO		-	М.	37	m		T.	3 1		111	12	~	2	XX.	20.0	- 57	2.2		
ø				ev.			Ģ٠	44	414.	OP F		P F 5	***	• #	Y. C.	45		** *	4	**					**		**	777	,	1:1		٥
	w	₹.	*		40			٠.	A 80	Ata.		200			٠٠:	٠, ٠	ν.		-		٠.	<i>x</i> .		× 44,	χ	WX.	84			8.30	99	ĕ.
ø				•	•		~				200	ow:	w.	100		9.73	8.			- 2		æ.	٠.	1.00	ν.	400 S		~ ·			88	0
٦.		۱.	1.	κ.	c	1::	ŧł	œ.	70	t.	79		1.5	1.15		. 5	2.	730	G .*	- 1	∞.	24	٠.	~~~		83		6.	w	***	×.	
ď	ш		22	a v				$\alpha$	***								٠	V. 3	en.		200	30.00	× 2.	200	×.	0.34	West.		200		887	٠

### Will the GST be Effective in the Information Age?

#### by Michael Hekimlan

Microsoft Injuction RAMs Home to Computer Suppliers—the Implications of Copying Unlicensed Software: A casenote of Microsoft Corp & Ancor v BusinessBoost Pty Ltd & Ors [1999] FCA 1384 ...... by Trevor Jeffords

Continued from page 1

A recent suggestion is that the world's 230 stock markets would shrink to just five by 20101 and one of the main threats would be ECNs which currently compete with NASDAQ (25% of market volume) and, to a much lesser extent, the NYSE (3-5% of volume) by offering share trading in US listed stocks outside the home Exchange. (The lower percentage on the NYSE market being due to the restrictive off-market trading regulations and less accommodating market structure). The controversy these new systems have created is compounded when an ECN like Island claims to have processed over 10% of NASDAQ's volume with just two Compaq servers costing less than USD150,000 and a staff of under 20 people.

The authors argue that existing stock markets can and will provide the

architecture to serve future global capital formation. The US experience of the growth of ECNs is not necessarily transportable to Asian-Pacific markets or any other markets which have fully automated trading and execution structures and offer greater market-depth transparency relative to their major US counterparts. However, when these US systems complete their current adoption of greater automated structures and commercialise through demutualisation, ECNs in their current form may well prove to be a passing fad. In any event, it is difficult to imagine ECNs overtaking US Exchanges, on which ECNs are dependent for the listing and price discovery of issued securities.

On the other hand, it is imminent that ECNs and ATSs (which are advanced trading mechanisms similar to ECNs

but which do not compete with US exchanges) will expand into noncompeting markets, such as efficient and transparent trading for otherwise low visibility over-the-counter products or emerging markets whose Exchanges do not traditionally accommodate, such as the small enterprises market. ATSs are also likely to expand internationally to provide single access entry point into multiple markets and to be used as electronic facilities by more traditional exchanges. One study estimates that such ATSs have grown at a geometric rate of 200% in the last 3 years<sup>2</sup> and are likely to form part of the future global market as emerging exchanges.

A comparison of the major types of stock market structures, their restructuring agenda and particular regulatory characteristics reveal the following significant trends and factors for the future global market:



## **COMPUTERS & LAW**

#### **Editors**

Brendan Scott
c/-Gilbert & Tobin
50 Carrington Street
Sydney NSW 2000
Tel +61 2 9367 8964
Fax +61 2 9367 3111
email: bscott@gtlaw.com.au

Lesley Sutton c/-Freehills MLC Centre Martin Place Sydney NSW 2000 Tel +61 2 9225 5169 Fax +61 2 9322 4000

Fax +61 2 9322 4000 email: lesley\_sutton@freehills.com.au Kent Davey

c/-Australian Government Solicitors 200 Queen Street (DX 50) Melbourne VIC 3000 Tel +613 9242 1242 Fax +613 9242 1481 email: kent.davey@ags.gov.au

Subscription: \$32.00\* per 4 issues

Advertisements: Inserts \$300.00°; for advertisements within the journal, rates and information will be provided by the Editors on request Articles, news items, books for review and other items of interest may be sent to the Editors. Journal contents may be reproduced if the source is acknowledged.

\*These prices are not inclusive of GST.

### Global Online Trading, ENCs & ATSs

Asian-Pacific markets, which are typically order-driven auction systems are more evolved in automated execution than the NASDAQ dealer market and the NYSE specialist market. Notwithstanding that Asian-Pacific markets (excluding Japan) represent a small percentage of the world market, the efficiency of the fully automated platform provides little scope for ECNs to compete with these markets' liquidity monopoly. Such exchanges which have electronic-limit-order-book structures are the fittest for adopting advanced platforms such as open-interface and straight-through-processing (STP)(ie external access with no human intervention), which are the latest phases in market automation and telecommunication expanding broadbands. This will ensure the two critical elements of stockmarket survival in the cyber-age: liquidity and investor choice. Such automation is becoming imperative where the current financial system cannot sustain trading activity at the projected volume.

The Australian Stock Exchange (ASX) leads the Asia-Pacific with its introduction of open-interface (ie external access) to SEATS in November 1997 with the possibility of STP (ie no human intervention), which was introduced in Australia by E\*Trade in November 1998. The significance of this is demonstrated by the narrowing of the gap between the ASX and US markets in online trading; approximately 16-18% of trades are currently done online in Australia compared to 25% in the US (nine months ago the statistics stood at 8% (ASX) and 15% (US)). Competing Asian-Pacific markets that are developing similar automated order-driven structures (eg Tokyo, Singapore, Jakarta, and Hong Kong) with open-interface and STP, will also be competitively placed.3

Currently, STP is generally not possible in the large US markets, where the trader must typically negotiate with a NASDAQ marketmaker or the NYSE's floor crowd for price improvement before execution occurs. (This is with the exception of

NASDAQ's Small Order Execution System with the use of Nasdaq's Application Programming Interface.) Market depth in these markets is also less transparent relative to automated markets. Consequently, ECNs have been able to infiltrate the US markets' liquidity because of such 'efficiencies holes'. ECNs essentially allow trading outside NASDAO's and NYSE's market system by offering investors automated execution in an independent electronic limit order book which offers greater transparency.

Another important factor for the growth of ECNs is the regulation of off-market trades and ECNs' activities. Such regulations are less stringent in the US (in particular NASDAQ) compared to regulations in Asia-Pacific, which tend to be prohibitive of ECNs' off-market trades. Despite imminent deregulatory reform in Asia-Pacific, however, it is unlikely that ECNs can compete with exchanges on the fundamental principles of liquidity, counter-party integrity and regulatory infrastructure. This is compounded by the development of ATSs by exchanges to attract order flow; eg SEHK's AMS/3, which will accommodate online trading, and NYSE's Institutional Xpress, which will electronically centralise its 'upstairs' market. A potential niche for ECNs in automated markets, however, is to operate in the after hours or overnight phase, which is not fully automated by Asian-Pacific exchanges.

The US exchanges are following the ASX's evolving lead with further automation and commercialisation through demutualising in a counter effort to fend off the infiltration of ECNs. NASDAQ and NYSE are increasingly offering investors greater direct access and transparency. More recently, the SEC approved an enhanced NASDAQ execution system which will provide automatic execution of up to 9,900 shares. It is predicted that "this will have a real impact on ECNs in a negative way."4 This will also create dynamic implications for competing

exchanges when the US giants start selling their services to the world, including Australia.

As ECNs' competitive advantages diminish, the exchange in the ether is mostly likely to consist of an intermarket link between current major exchanges, who are able to satisfy the investor's need to access multiple markets through a single access-point; this investor today has sway over market liquidity and volatility, as exemplified by the current internet boom. The surviving exchanges will be those which demutualise, form global alliances through the provision of remote and reciprocal access to member-brokers, and provide open-interface to allow STP. These measures will serve to globalise markets in real-time and stem any leak of liquidity to competing ECNs and ATSs.

To survive as co-participants in the future market, ECNs and ATSs are likely to internationalise their platforms to take advantage of 'efficiency holes' in the globalisation process. Such holes may include the investor's need for simultaneous access to multiple markets not being met by its local market. Currently, Bloomberg and Instinet (two of the largest global ATSs) offer institutions global access to major exchanges, eg Instinet is a member of 18 exchanges and trades in 40 countries,5 and in the near future, NYFIX Millennium will provide US institutions with a single network link with access to every equity exchange in the US with intelligent order-routing functionality. Expansion into nontraditional markets is also on the ATSs' agenda. For example, Instinet recently upgraded its platform to offer secondary trading in debt securities to its members, and recently the Association of Unit Trusts and Investment Funds (Autif) announced it will roll out in June 2000 a FIX-based platform for UK brokers that will enable them to trade shares of units trusts, and provide customers with consolidated holding account statements.