# eCommerce in the Fixed-Income Markets

## THE 2006 REVIEW OF ELECTRONIC TRANSACTION SYSTEMS



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*eCommerce in the Fixed-Income Markets: The 2006 Review of Electronic Transaction Systems* was conducted and compiled by the staff of the Securities Industry and Financial Markets Association.

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### **Review of Electronic Transaction Systems for Fixed-Income Markets**

Adoption of electronic execution by traders in the fixed-income markets has been accelerating in 2006. According to data provided by operators of electronic trading systems for fixed-income securities, 74 percent witnessed an increase in trading volume during the first three quarters of 2006 compared to 2005. Nearly 68 percent saw an increase of over five percent in transaction volume, 47 percent reported an increase of at least 10 percent and 28 percent said volume increased 20 percent or more from 2005.

These data indicate the rapidly increasing adoption of electronic execution in the fixed-income markets globally. Since electronic trading in fixed-income securities first emerged in the late 1990s, trading platforms have become more sophisticated and have continued to offer services that reduce costs and risks and improve execution and trading efficiency. Increasing adoption of electronic execution enhances the liquidity of the trading platforms. In turn, enhanced liquidity, as well as efficiencies and cost reductions, continue to draw users to the electronic trading marketplace.

### Types of Systems

Every year since 1997, the Securities Industry and Financial Markets Association has surveyed firms that offer electronic trade execution services in fixed-income securities and related products, principally for broker-dealers, institutional investors and bond issuers. In general, fixed-income trading platforms can be categorized in two principal ways:

- By who the participants are and how they trade with each other.
  - Inter-dealer platforms support trading only between broker-dealers.<sup>1</sup>
  - Dealer-to-customer platforms—either single-dealer or multipledealer—support trading between broker-dealers and investors.<sup>2</sup> Investors are overwhelmingly institutional but 12 platforms report that retail investors are eligible to participate.
  - New issue platforms support sales of new bond issues to either brokerdealers or institutional investors or both.
- By the methodology or technology used for price discovery and trade execution.
  - Request-for-quote systems, most often used in dealer-to-customer platforms, allow investors to request executable price quotations from

<sup>&</sup>lt;sup>1</sup> Inter-dealer platforms are sometimes referred to as "B2B" platforms.

<sup>&</sup>lt;sup>2</sup> Dealer-to-customer platforms are often referred to as "B2C" platforms.

broker-dealers. The participants that requested the quotes can then execute the trade within a specified time limit at the quoted price. In the case of multi-dealer systems, the requesting customer can obtain pre-trade quotes from each of the dealers with which it has a customer relationship.

- Order-driven systems allow participants to enter quotations into a central order book which can be viewed and executed by all other participants on the platform.
- On market-making or cross-matching systems, participants make ongoing buy and sell quotations during the trading day. Trades are executed when bid and offer quotations and amounts match or when a participant chooses to accept a published, quoted price.
- Auction systems, most often used for new-issue sales, allow participants to bid simultaneously for a securities offering. Individual bids may or may not be known to other bidders.

### Categories of Systems

Respondents to this year's survey characterized their trading platforms as follows:

Table 2.

Type of Platform	Number of Platforms
Inter-dealer	26
Single dealer-to-(buy-side) custo	omer 07
Multiple dealer-to-(buy-side) cu	stomer 26
Issuer to dealer/investor	09

As for trading method, respondents characterized their platforms as follows:

Table 3.

Trading Method	Number of Platforms
Order driven	38
Market-making/Cross-matching	25
Request for quote	32
Auction	16

Based on this year's survey responses, 22 respondents report that their platforms are compatible with FIX protocol version 4.4. In 2003, the Fix Protocol Organization (FPO) released version 4.4 of its technical specification for the electronic communication of trade-related messages. Version 4.4 included a large number of

additions and changes designed to facilitate the use of FIX for trading fixed-income products. The fixed-income enhancements included in version 4.4 resulted from extensive collaboration among The Securities Industry and Financial Markets Association members, trading platform vendors and members of the FPO.

### Value-added Services

Again this year, a majority of respondents (34 of 62) reported that their platforms provide users with direct access to trade clearance and settlement systems. Respondents reported links to a variety of clearing organizations around the world, including DTCC, NSCC, GSCC, Euroclear, Clearstream and Bloomberg, among numerous others.

In addition to clearing and settlement, respondents reported that they offer their customers a variety of other value-added products and services designed to streamline the trading process. A summary of services offered follows:

Value-added Service	Number of Platforms
Confirmation/allocation services	44
Order management	34
Pre-trade analytics	24
Electronic research delivery	18
Regulatory/compliance services	26
Identity management	21
Risk monitoring or management	16
Direct feed of dealer inventory to	)
Buy-side portfolio	14

PLATFORM NAME	TYPE OF SYSTEM	TRADING METHOD	TRADING PLATFORM PARTICIPANTS	PRE-TRADE PRICES AVAILABLE	INFORMATION AVAILABLE TO PARTICIPANTS <sup>1</sup>	INFORMATION AVAILABLE	SECTOR COVERAGE <sup>1</sup>
Autobahn	Single dealer-to (buy-side) customer	Order driven Market-making or Cross-matching Request for quote	Institutional investors	Executable	Issuer Name, Spread, CUSIP/ISIN number, Rating, Maturity, Coupon	In real-time	U – ust, as, su, cp, mm, hg, hy, em, irs, cds E – sv, as, su, mm, hg, hy, pf, ss, em, irs, cds A – sv, as, su, mm, hg, hy, pf, em, ss, irs, cds
Automated Bond System (ABS)	Inter-dealer	Order driven	Dealers as providers of liquidity Dealers as consum- ers of liquidity	Executable Last traded price	Price of trade, Yield of trade, Historical trade data, Issuer name, Issue size, Trade size, CUSIP/ISIN number, Rating, Maturity, Coupon	In real-time	U – ust, as, hg, hy, Muni, em E – sv, hg, hy, as
Axon	Issuer to dealer/investor	Request for quote	Dealers as providers of liquidity Institutional invest- tors	Executable	Price, Historical trade data, Size	At end of day	E wl
Bank of Thailand (e- Bidding)	Issuer to dealer/investor	Auction	Institutional investors	Last traded price	Yield of trade, Historical trade data, Issuer name, Issue size, CUSIP/ISIN number, Maturity, Coupon	In real-time	
Barclays Bank (Bondscape)	Multiple dealer-to- (buy-side) customer	Order Driven	Institutional investors Retail investors	Indicative	Price of trade, Yield of trade, Issuer name, Executed at the bid or ask,Trade size, CUSIP/ISIN number, Rating, Maturity, Coupon	In real-time	E – sv, as, su, hg

PLATFORM NAME	TYPE OF SYSTEM	TRADING METHOD	TRADING PLATFORM PARTICIPANTS	PRE-TRADE PRICES AVAILABLE	INFORMATION AVAILABLE TO PARTICIPANTS	INFORMATION AVAILABLE	SECTOR COVERAGE <sup>1</sup>
Bear Stearns & Co. Inc.	Inter-dealer Single dealer-to (buy-side) Customer Multiple dealter-to- (buy-side) customer) Issuer to dealer/ investor	Order driven Request for quote		Executable Indicative	Price, Yield, Spread, Size, Historical trade data, issuer name, trade size, CUSIP/ISIN number, rating, maturity, coupon, MSRB, TRACE	In real-time	U – ust, as. su, hg, hy, ambs, muni, em, cds E – sv, su, em A – sv, su, hg, hy
BEX (FIRSTs)	Muntiple dealer-to- (buy-side) customer	Order driven Request for quote	Dealers as providers of liquidity Dealers as consum- ers of liquidity Institutional invest- ors	Indicative	Price, Yield, Historical trade data, Issuer name, Issue size, Executed bid or ask, Spread, Trade size, CUSIP/ISIN number, Rating, Maturity, Coupon, TRACE	In real-time	
Blackbird	Multiple dealer-to- (buy-side) customer	Order driven Market-making or cross-matching Request for quote Auction	Dealers as providers of liquidity Dealers as consum- ers of liquidity Institutional invest- ors	Executable Indicative Last traded price	Price, Bid/Ask, Issue zize, Historical data, trade size	In real-time	U – ambs, nm, irs, cds, ft E – mbs, irs, cds, ft A – mbs, irs, cds, ft
Bloomberg, LP <sup>2</sup>	Inter-dealer Single dealer-to (buy-side) customer Multiple dealer-to- (buy-side) customer Issuer to dealer/ Investor	Order driven Request for quote Auction	Dealers as providers of liquidity Dealers as consum- ers of liquidity Institutional invest- ors	Executable Indicative Last traded price	Price, Yield, Spread, Size	In real-time	U – ust, as, su, cp, mm, hg, hy, em, irs, cd, ft E – sv, as, su, cp, mm, hg, hy, pf, ss, em, irs, cd, ft A – sv as, su

PLATFORM NAME	TYPE OF SYSTEM	TRADING METHOD	TRADING PLATFORM PARTICIPANTS	PRE-TRADE PRICES AVAILABLE	INFORMATION AVAILABLE TO PARTICIPANTS	INFORMATION AVAILABLE	SECTOR COVERAGE <sup>1</sup>
BondDesk Group	Inter-dealer	Market-making or cross-matching	Dealers as providers of liquidity Dealers as consum- ers of liquidity	Executable Indicative Last traded price	Price, Yield, Spread, Size	In real-time	U – ust, su, hg, hy, ambs, nm, abs, muni
Bondpage.com	Single dealer-to (buy-side) customer		Dealers as providers of liquidity Dealers as consum- ers of liquidity Institutional invest- ors Retail investors	Executable Last traded price	Price, Yield, Issuer name; Issue size, Trade size, CUSIP/ISIN number, Rating, Maturity, Coupon, MSRB, TRACE	In real-time	U – ust, as, hg, hy, Muni, ambs, nm, abs, em, cp, mm
Bondscape.net	Multiple dealer-to- (buy-side) customer.	Order driven	Dealers as consum- ers of liquidity Institutional invest- ors Retail investors	Indicative	Price, Yield, Bid/Ask, Size	In real-time	E – sv, as, su, hg
BondVision	Multiple dealer-to- (buy-side) customer	Request for quote	Dealers as providers of liquidity Institutional invest- ors	Last traded price	Price, Yield, Historical, Issuer name, CUSIP/ISIN number, Rating, Maturity, Coupon	In real-time	U – ust, as su E – sv, as, su, mm, hg, pf, mbs, abs, ss, etd, em
BondWave	Inter-dealer Multiple dealer-to- (buy-side) customer	Order driven	Dealers as providers of liquidity Dealers as consum- ers of liquidity Institutional invest- ors	Indicative Executable	Price, Yield, Spread, Historical, Issuer name Issue size, Spread, Trade size, CUSIP/ISIN number, Rating, Maturity, Coupon, MSRB	With a delay	U – muni
BondWeb	Inter-dealer Multiple dealer-to- (buy-side) customer	Market-making or Cross-matching Request for quote	Dealers as providers Of liquidity Dealers as consum- ers of liquidity Institutional invest- tors	Indicative Executable	Price, Yield, Spread, Size	In real-time	U – ambs, nm

PLATFORM NAME CanDeal	TYPE OF SYSTEM Multiple dealer-to- (buy-side) customer	TRADING METHOD Request for quote	TRADING PLATFORM PARTICIPANTS Dealers as providers of liquidity Institutional invest- ors	PRE-TRADE PRICES AVAILABLE Indicative	INFORMATION AVAILABLE TO PARTICIPANTS Issuer name, Spread. Maturity, Coupon	INFORMATION AVAILABLE In real-time	$\begin{array}{c} \text{SECTOR} \\ \text{COVERAGE}^1 \\ \text{U}-\text{ca, cg} \\ \text{X}-\text{cmm} \end{array}$
Chapdelaine & Co.	Inter-dealer Multiple dealer-to- (buy-side) customer	Market-making or cross-matching	Dealers as providers of liquidity Dealers as consum- ers of liquidity	Last traded price	Price, Yield, Bid/Ask, Spread, Historical, Issuer name, Trade size, CUSIP/ISIN number, Rating, Maturity, Coupon, MSRB	With a delay	U – muni
Chicago Board of Trade (CBOT)	Inter-dealer Single dealer-to (buy-side) customer Multiple dealer-to- (buy-side) customer Issuer to dealer/ investor	Order driven Market-making or cross-matching Request for quote	Dealers as providers of liquidity Dealers as consum- ers of liquidity Institutional invest- ors Retail investors	Indicative Last traded price	Price	In real-time	U – ft, eto
creditex	Inter-dealer	Order driven Auction	Dealers as providers of liquidity Dealers as consum- ers of liquidity	Executable Indicative Last traded price	Price, Bid/Ask, Historical, Issuer name, Issue size, Trade size, CUSIP/ISIN number, Rating, Maturity, Coupon	In real-time	U - cds E - cds A - cds
Credit Suisse First Boston LLC	Single dealer-to (buy-side) customer	Request for quote	Institutional invest- ors Retail investors	Indicative	Price, Yield, Bid/Ask, Historical, Issuer name, Issue size, Spread, Trade size, CUSIP/ISIN number, Rating, Maturity, Coupon	In real-time	U – ust, as, ft, eto, em, fxe E – sv, as, su, hg, hy, pf, em, etd, fxe, ft, eto A – sv, ft, eto

PLATFORM NAME	TYPE OF SYSTEM	TRADING METHOD	TRADING PLATFORM PARTICIPANTS	PRE-TRADE PRICES AVAILABLE	INFORMATION AVAILABLE TO PARTICIPANTS	INFORMATION AVAILABLE	SECTOR COVERAGE <sup>1</sup>
CreditTrade	Inter-dealer	Market-making or cross-matching	Dealers as providers of liquidity Dealers as consum- ers of liquidity	Executable Indicative Last traded price	Price, Bid/Ask, Historical, Issuer name, Issue size, Trade size, CUSIP/ISIN number, Maturity, Coupon	In real-time	U - cds E - hg, cds A - cds
dbconvertibles.com	Single dealer-to (buy-side) customer	Request fro quote	Institutional invest- ors	Indicative	Issuer name, Issue size, CUSIP/ISIN number, Rating, Maturity, Coupon	In real-time	E – hg, hy
Debtdomain.com	Inter-dealer Single dealer-to (buy-side) customer Multiple dealer-to- (buy-side) customer	Order driven Market-making or cross-matching Request for quote	Dealers as providers of liquidity Dealers as consum- ers of liquidity Institutional invest- ors Retail investors	Executable Indicative Last traded price	Price, Yield, Historical, Issuer name, Issue size, Trade size, Maturity	In real-time	U – em, wl E – em, wl A – em, wl
eSpeed, Inc.	Inter-dealer	Order driven	Dealers as providers of liquidity Dealers as consum- ers of liquidity	Executable Indicative Last traded price	Price, Yield, Bid/Ask, Spread to benchmark, Trade size, CUSIP/ISIN number, Maturity, Coupon	In real-time	U - ust, as, irs, ft,mbsE - sv, as, su, mbs,irs, ftA - sv
Eurex	Multiple dealer-to- (buy-side) customer	Order driven Market-making or cross-matching Request for quote	Dealers as providers of liquidity Dealers as consum- ers of liquidity Institutional invest- ors	Executable Last traded price	Price, Historical, Trade size, CUSIP/ISIN number, Maturity, Coupon	In real-time	U – ust, ft E – sv, as, su, pf, etd, irs, ft, eto, otco

PLATFORM NAME	TYPE OF SYSTEM	TRADING METHOD	TRADING PLATFORM PARTICIPANTS	PRE-TRADE PRICES AVAILABLE	INFORMATION AVAILABLE TO PARTICIPANTS	INFORMATION AVAILABLE	SECTOR COVERAGE <sup>1</sup>
Eurex Bonds GmbH	Inter-dealer	Order driven Market-making or cross-matching	Dealers as providers of liquidity Dealers as consum- ers of liquidity	Executable Last traded price	Price, Yield, Historical, Issuer name, Trade size, CUSIP/ISIN number, Maturity, Coupon	In real-time	E – sv, as, su, mm, pf, ss, il
Eurex Repo GmbH	Inter-dealer	Order driven	Dealers as providers of liquidity Dealers as consum- ers of liquidity	Last traded price Executable	Price, Trade size, CUSIP/ISIN number, Maturity	In real-time	E – sv, as, pf, ss
Eurex U.S.	Multiple dealer-to- (buy-side) customer	Order driven Market-making or cross-matching Request for quote Auction	Dealers as providers of liquidity Dealers as consum- ers of liquidity Institutional invest- ors Retail Investors	Executable Last traded price	Price, Issue size, Trade size, Maturity	In real-time	U - ft, fx E - ft, fx A - ft, fx
FTN Financial	Multiple dealer-to- (buy-side) customer	Order driven Market-making or cross-matching Request for quote	Dealers as consumers of liquidity Institutional invest- ors	Executable	Price, Yield, Spread, Issuer name, Issue size, CUSIP/ISIN number, Rating, Maturity, Coupon	In real-time	U – ust, as, hg, hy, muni
GFI Group	Inter-dealer	Market-making or cross-market	Dealers as providers of liquidity Dealers as consum- ers of liquidity	Executable Indicative Last traded price	Price, Bid/Ask, Historical, Issuer name, Spread, Trade size, CUSIP/ISIN number, Maturity, Coupon	In real-time	$\begin{array}{c} U-hg, hy, em,\\ cds, cdsi\\ E-sv, as, su, hg,\\ mbs, abs, ss,\\ cds, cdsi, otcds,\\ lcds\\ A-hg, hy, em,\\ cds, cdsi\\ \end{array}$

PLATFORM NAME Goldman, Sachs & Co.	TYPE OF SYSTEM Multiple dealer-to (buy-side) customer	TRADING METHOD Order driven Market-making or Cross-matching Request for quote Auction	TRADING PLATFORM PARTICIPANTS Dealers as providers of liquidity Dealers as consum- ers of liquidity Institutional invest- ors Retail Investors	PRE-TRADE PRICES AVAILABLE Executable Indicative Last traded price	INFORMATION AVAILABLE TO PARTICIPANTS Price, Yield, Bid/Ask, Spread, Historical, Issuer name, Issue size, Trade size, CUSIP/ISIN number, Rating, Maturity, Coupon, MSRB, TRACE	INFORMATION AVAILABLE In real-time With a delay	SECTOR COVERAGE1 $U - ust, as, su, cp,$ mm, hg, hy, nm, muni, em, cds, ft, fx, ca $E - sv, as, su, cp,$ hg, pf, em, irs, cds, ft, fx $A - sv, fx$
Grant Street Group	Issuer to dealer/investor	Request for quote	Dealers as providers of liquidity Dealers as consum- ers of liquidity		Yield, Bid/Ask, Issuer name, Issue size, Trade size, Rating, Maturity, Coupon	In real-time With a delay	U – ust, as, cp, mm, muni, irs, cds, oth
G.X. Clarke & Co.	Single dealer-to (buy-side) customer	Order driven Market-making or cross-matching Request for quote	Dealers as providers of liquidity Dealers as consum- ers of liquidity Institutional invest- ors	Executable	Price, Yield, Bid/Ask, Spread, Issuer name, Issue size, CUSIP/ISIN number, Maturity, Coupon, Trade size	In real-time	U – ust, as, ambs
HDAT	Inter-dealer	Quote driven Auction	Dealers as providers of liquidity Dealers as consum- ers of liquidity Institutional invest- Ors Retail investors	Executable Last traded price	Price, Historical, Issuer name, Issue size, Trade size, CUSIP/ISIN number, Maturity, Coupon	In real-time	E – sv
HTDonline	Inter-dealer	Market-making or cross-matching Request for quote Auction	Dealers as providers of liquidity Dealers as consum- ers of liquidity Institutional invest- ors	Indicative Last traded price	Price, Yield, Spread, Historical, Issuer name, Trade size, CUSIP/ISIN number, Rating, Maturity, Coupon, MSRB	In real-time	U – muni

ELECTRONIC TR	ADING PLATF	ORM CHARAC	TERISTICS AN	D SERVICES (d	continued)	

PLATFORM NAME ICAP Electronic Broking	TYPE OF SYSTEM Inter-dealer	TRADING METHOD Order driven	TRADING PLATFORM PARTICIPANTS Dealers as providers of liquidity Dealers as consum- ers of liquidity	PRE-TRADE PRICES AVAILABLE Executable	INFORMATION AVAILABLE TO PARTICIPANTS Price, Yield, Bid/Ask, Spread, Historical, issuer name, Trade size, CUSIP/ISIN number, Maturity, Coupon	INFORMATION AVAILABLE In real-time	SECTOR COVERAGE <sup>1</sup> U – ust, as, su, mm, ambs cds, fx, ca E – sv, as, su, hg, hy, pf, irs, cds, fx xf A – sv, xf
iDeal VRTS (Dalcomp)	Single dealer-to (buy-side) customer Multiple dealer-to- (buy-side) customer Issuer to dealer/ investor	Order driven Auction	Dealers as consum- ers of liquidity Institutional invest- ors Retail investors	Executable	Price, Yield, Spread, Historical data, Issuer name, Issue size, Trade size, CUSIP/ISIN number, Rating, Maturity, Coupon, MSRB	In real-time	U – cp, mm, hg, hy, muni, cd
J.P. Morgan Express (JPeX)	Inter-dealer	Order driven Request for quote	Dealers as consum- ers of liquidity Institutional invest- ors	Executable Indicative Last traded price	Price, Yield, Spread, Historical, Issuer name, issue size, Bid/Ask, Trade size, CUSIP/ISIN number, Rating, Maturity, Coupon, MSRB, TRACE	In real-time With a delay	U – ust, as, su, cp, mm, hg, hy, ambs, nm, muni, em, irs, cds, ft, fx, ca E — sv, su, as, hg, hy, pf, ss, em, irs, cds, fx, ft A – sv, cp, hg, em, fx
LehmanLive	Single dealer-to (buy-side) customer	Order driven Request for quote	Dealers as providers of liquidity Dealers as consum- ers of liquidity Institutional invest- ors	Executable Indicative	Price, Yield Spread, Issuer name, issue size, Bid/Ask, Trade size, CUSIP/ISIN number, Rating, Maturity, Coupon, MSRB, TRACE	In real-time	U – ust, as, su, ft, muni, irs, fx E – ft, fx A – ft, fx

PLATFORM NAME	TYPE OF SYSTEM	TRADING METHOD	TRADING PLATFORM PARTICIPANTS	PRE-TRADE PRICES AVAILABLE	INFORMATION AVAILABLE TO PARTICIPANTS	INFORMATION AVAILABLE	SECTOR COVERAGE <sup>1</sup>
MarketAxess	Multiple dealer-to- (buy-side) customer	Market-making or Cross-matching Request for quote	Dealers as provid- ers of liquidity Institutional invest- ors	Indicative Last traded price Executable	Price, Yield, Spread, Historical, Issuer name, issue size, Trade size, CUSIP/ISIN number, Rating, Maturity, Coupon, TRACE	In real-time	U – as, su, hg, hy, em, cds, frn E – su, hg, hy, em, cds, frn
Merrill Lynch	Single dealer-to (buy-side) customer	Order driven Request for quote Auction	Dealers as provid- ers of liquidity Dealers as consum- ers of liquidity Institutional invest- ors Retail Investors	Executable Indicative	Price, Yield, Bid/Ask, Spread, Historical, Issuer name, Issue size, Trade size, CUSIP/ISIN number, Rating, Maturity, Coupon	In real-time	U – ust, as, su, cp, mm, hg, muni, cd
Merrill Lynch – Asia Pacific	Single dealer-to (buy-side) customer	Order driven Request for quote	Institutional invest- ors	Executable Indicative	Price, Yield, Issuer name, Bid/Ask, Trade size, CUSIP/ISIN number, Maturity, Coupon	In real-time	U - ust, hg, hy, em E - sv, hg A - sv, hy, em
Mizuho Securities	Single dealer-to (buy-side) customer	Market-making or cross-matching Request for quote	Dealers as provid- ers of liquidity Dealers as consum- ers of liquidity Institutional invest- ors Retail investors	Executable Indicative	Price, Yield, Issuer name, Issue size, Trade size, CUSIP/ISIN number Maturity, Coupon	In real-time	U – ust, as, mm
МОТ	Inter-dealer	Order driven Auction	Dealers as provid- ers of liquidity Dealers as consum- ers of liquidity	Executable Indicative Last traded price	Price, Bid/Ask, Historical, Issuer name, Issue size, CUSIP/ISIN number, Rating, Coupon, MSRB	In real-time	E – sv su, hg, hy, mbs, abs, ss, em, etd, ft, eto

PLATFORM NAME	TYPE OF SYSTEM	TRADING METHOD	TRADING PLATFORM PARTICIPANTS	PRE-TRADE PRICES AVAILABLE	INFORMATION AVAILABLE TO PARTICIPANTS	INFORMATION AVAILABLE	SECTOR COVERAGE <sup>1</sup>
MTS Group <sup>3</sup>	Inter-dealer	Order driven Market-making or cross-matching Auction	Dealers as provid- ers of liquidity Dealers as consum- ers of liquidity	Executable Last traded price	Price, Yield, Bid/Ask, Historical, Issuer name, Trade size, CUSIP/ISIN number, Rating, Maturity, Coupon	In real-time	U - as, su E - sv, as, su, mm, pf, mbs, abs, ss, em A - sv
PDEx (Philipine Dealing & Exchange Corp.	Inter-Dealer	Order driven Market-making or Cross-matching	Dealers as provid- ers of liquidity Dealers as consum- ers of liquidity	Last traded price Executable	Price, Yield, Historical, Issuer name, Trade size, CUSIP/ISIN number, Maturity, Coupon	In real-time	A - sv, fx
RetLots Exchange	Single dealer-to- (buy-side) customer	Market-making or cross-matching	Institutional in- vestors (buy side) Retail investors	Executable Last traded price	Price, Yield, Historical, Issuer name, Issue size, Trade size, CUSIP/ISIN number, Rating, Maturity, Coupon	In real-time	U – as, su, hg, hy, em E – sv, as, hg, hy, Em, ss
Reuters Trading for Fixed Income	Single dealer-to- (buy-side) customer Multiple dealer-to- (buy-side) customer	Request for quote	Dealers as providers of liquidity Dealers as consum- ers of liquidity Institutional invest- ors Retail investors	Executable	Price, Yield, Bid/Ask, Spread, Historical, Issuer name, Issue size, Trade size, CUSIP/ISIN number, Rating, Maturity, Coupon, TRACE	In real-time	U – ust, as, su, hg, hy, ambs, nm, abs, em E—sv, as, su, hg, hy, pf, mbs, abs, ss, em A – sv, as, su, hg, hy, pf, mbs, abs, ss, em
SENAF	Inter-dealer	Order driven Market-making or cross-matching	Dealers as providers of liquidity Dealers as consum- ers of liquidity		Price, Yield, Bid/Ask, Historical, Issuer name, Issue size, Spread, Trade size, CUSIP/ISIN number, Maturity, Coupon	In real-time	E – sv

PLATFORM NAME Surabaya Stock	TYPE OF SYSTEM Inter-dealer	TRADING METHOD Order driven	TRADING PLATFORM PARTICIPANTS Dealers as providers	PRE-TRADE PRICES AVAILABLE Last traded price	INFORMATION AVAILABLE TO PARTICIPANTS Price, Yield, Issuer	INFORMATION AVAILABLE In real-time	SECTOR COVERAGE <sup>1</sup> U – ust, as, hg, hy
Exchange (Centralized Trading Platform)	Single dealer-to- (buy-side) Customer Multiple dealer-to- (buy-side) customer	Auction	of liquidity Retail investors		nam,e Issue size, Bid/Ask, Trade size, Rating, Maturity, Coupon		
SWX Eurobonds	Multiple dealer-to- (buy-side) customer	Order driven	Dealers as providers of liquidity Dealers as consum- ers of liquidity Institutional invest- Ors Retail investors	Executable Last traded price	Price, Historical, Issuer name, Issue size, Trade size, CUSIP/ISIN number, Maturity, Coupon	In real-time	E – sv, as, su, hg, hy, pf, abs, ss, em, etd
TAAPSLink	Issuer to dealer/in- vestor	Auction	Dealers as providers of liquidity Institutional invest- ors Retail investors		Price, Yield, Issuer name, Issue size, Trade size, CUSIP/ISIN number, Maturity, Coupon	In real-time	U – ust
TDAX Eurobonds	Inter-dealer Single dealer-to- (buy-side) Customer Multiple dealter-to- (buy-side) customer	Order driven Request for quote	Dealers as consum- ers of liqudity Institutional invest- ors Retail investors	Executable	Price, Yield, Issuer name, Trade size, Rating, Maturity, Coupon	In real-time	U – su, hg, em E – sv, su, hg, em
The MuniCenter	Inter-dealer	Market-making or cross-matching	Dealers as providers of liquidity Dealers as consum- ers of liquidity Institutional invest- ors	Executable Last traded price	Price, Yield, Spread, Historical, Issuer name, Issue size, Trade size, CUSIP/ISIN number, Rating, Maturity, Coupon, MSRB	In real-time	U – ust, as, hg, hy, muni, cd, mm

PLATFORM NAME	TYPE OF SYSTEM	TRADING METHOD	TRADING PLATFORM PARTICIPANTS	PRE-TRADE PRICES AVAILABLE	INFORMATION AVAILABLE TO PARTICIPANTS	INFORMATION AVAILABLE	SECTOR COVERAGE <sup>1</sup>
Thomson TradeWeb	Multiple dealer-to- (buy-side) customer	Order driven Request for quote	Dealers as providers of liquidity Dealers as consum- ers of liquidity Institutional invest- Ors Retail investors	Indicative Executable	MSRB, TRACE	In real-time	U – ust, as, su, cp mm, hg, ambs, irs, cds, muni, ca, oth E – sv, su, cp, pf, hg, irs, cds
TLX S.p.A.	Multiple dealer-to- (buy-side) customer	Order driven Market-making or cross-matching	Dealers as providers of liquidity Dealers as consum- ers of liquidity	Executable Last traded price	Price, Issuer name, Trade size, CUSIP/ISIN number, Rating Maturity, Coupon	In real-time	U – ust, as, su, hg, hy, em E – sv, su, hg, hy, em
Tokyo Stock Exchange	Inter-dealer	Order drive Auction	Dealers as providers of liquidity Dealers as consum- ers of liquidity	Indicative Last traded price	Price, Spread, Trade size	In real-time	A – sv, hg, hy
TreasuryDirect <sup>4</sup>	Issuer to dealer/in- vestor	Order driven	Retail investors		Price, Yield, Issuer name, Issue size, Trade size, CUSIP/ISIN number, Maturity, Coupon	In real-time	U – ust
ValuBond, Inc.	Inter-dealer	Order driven Market-making or cross-matching Request for quote	Dealers as providers of liquidity Dealers as consum- ers of liquidity Institutional investors	Executable Indicative	Price, Yield, Historical, Issuer name, Issue size, Bid/Ask, Spread, Trade size, CUSIP/ISIN number, Rating, Maturity, Coupon, MSRB, TRACE	In real-time	U – ust, as, su, hg, hy, ambs, muni, cd, em

PLATFORM NAME Wells Fargo	TYPE OF SYSTEM Inter-dealer Multi dealer-to- (buy-side) customer	TRADING METHOD Market-making or cross-matching Request for quote	TRADING PLATFORM PARTICIPANTS Dealers as provi- ers of liquidity Dealers as consum- ers of liquidity	PRE-TRADE PRICES AVAILABLE Executable	INFORMATION AVAILABLE TO PARTICIPANTS Price, Yield, Trade size, CUSIP/ISIN number, Maturity, Coupon	INFORMATION AVAILABLE In real-time	SECTOR COVERAGE <sup>1</sup> U – ust, as
Yieldbroker	Multiple dealer- to(buy side) customer	Request for quote	Dealers as consum- ers of liquidity Institutional invest- ors	Indicative			U – as, su, mm, hg, ca E – sv, as, su, mm, hg, pf, ss A – sv, as, su, mm, hg, ss, ft, frn
Zions GovRate	Single dealer-to (buy-side) customer Multiple dealer- to(buy side) customer	Order driven Market-making or cross-matching Request for quote	Dealers as provi- ers of liquidity Dealers as consum- ers of liquidity Institutional invest- ors	Executable	Yield, Spread, Issuer name, Trade size, CUSIP/ISIN number, Maturity, Coupon	In real-time	U – ust, as, hg, muni

The following trading platforms are thought to currently be operating fixed-income platforms, but did not respond to our survey:

American Express Citigroup Fixed Income Direct De@lDone DebtX Fixed Income Seucrities, LLC HanoverTrade, Inc. Jefferies Fixed Income Division Morgan Stanley SunGard Transaction Network Tradebonds.com

### <sup>1</sup>Information Available to Participants:

Bid/Ask	Whether trade was executed at the bid or ask
Price	Price of trade
Spread	Spread to benchmark

### Sector Coverage:

- A = Asia
- E = Europe
- U = United States
- X = Other

abs	Asset-backed securities	etd	Exchange-traded funds	mtn	Medium-term notes
abcp	Agency backed commercial paper	fxf	FX futures	nm	Non-agency MBS
ambs	Agency MBS	fxo	FX Options	otccds	OTC CDS index options
as	Agency securities	frn	Floating rate notes, new issues	otco	OTC options
ca	Canadian debt securities	ft	Futures	pf	Pfandbriefe/covered bonds
cds	Credit derivatives	fx	FX	rp	Repo
cg	Canadian government, agency and	fxe	FX and equity	sd	Securitized derivatives
	provincial, Canadian government bonds	hg	High-grade corporate	sn	Structured notes
cdsi	CDS index tranches	hy	High-yield corporate	SS	Sub-sovereign securities
cp	Commercial paper	irs	Interest rate swaps	su	Supranational securities
cd	Certificate of deposit	lcds	Loan CDS	SV	Sovereign securities
cmm	Canadian money markets	il	Inflation linked bonds	ust	Treasury securities
eur	Euro bonds	mbs	Mortgage-backed securities	ustf	US Treasury futures
em	Emerging markets	mm	Other money market	wl	Whole loans
eto	Exchange-traded options	muni	Municipal securities	xf	Forward FX

Trade

Yield

Trade size

Yield of trade

 <sup>2</sup>Bloomberg includes Bloomberg All Q, Bloomberg Bond Trader and Bloomberg Money Market Platform.
 <sup>3</sup>MTS Group includes Euro MTS Limited, MTS Amsterdam, MTS Associated Markets, MTS Austria, MTS Deutschland, MTS France, MTS Greek Market, MTS Ireland, MTS Portugal SMGR, SA, MTS S.p.A., MTS Spain.
 <sup>4</sup>Treasury Direct includes a separate platform known as Legacy Treasury Direct.

## SYSTEMS

### **Autobahn Electronic Trading**

Deutsche Bank Winchester House 1 Great Winchester Street London EC2N 2DB United Kingdom 44.207.547.6469 www.autobahnfi.db.com

### Market:

Single dealer-to-(buy-side) customer

### **Platform Supports:**

Secondary market trading

### Trading Method:

Order driven Market-making or Cross-matching Request for quote.

### Market Participants Eligible/Not Eligible to Use Platform Directly:

Dealers as providers of liquidity –Not Eligible Dealers as consumers of liquidity –Not Eligible Institutional investors ("buy side") – Eligible Retail investors –Not Eligible

### Platform has a dedicated liquidity provider.

### Platform does not have a minimum trade size.

## Information available to all trading system in real-time for trades executed on this platform:

Coupon	Maturity
CUSIP/ISIN number	Rating
Issuer name	Spread to benchmark

### Products traded on the platform and the types of trade:

(U = US Products)	E = European Products		A = Asi	ian Products)
Product	Cash	Repo	Basis	Spread
Agency securities	U E A			U E A
Commercial paper	U			
Credit derivatives	U E A			
Emerging markets	U E A			
High-grade corporate	U E A			
High-yield corporate	U E A			

Cash	Repo	Basis	Spread
U E A	-		UEA
U E A			
ΕA			ΕA
ΕA			ΕA
ΕA			
U E A			U E A
U			U
	UEA UEA EA EA EA	UEA UEA EA EA EA	UEA UEA EA EA EA

### Products traded on the platform and the types of trade (Continued)

### Trading Available in all European Countries.

### Trading Available in all Asian Countries.

Platform provides direct access to trade clearance and settlement functions through: ETC, OMGEO, ALERT, Swapswire

### Trading platform is compliant with FIX Protocol version 4.4.

## Services other than price discovery/trade execution offered or plan to offer to users of the platform:

Confirmation/allocation – Currently Offered Order management – Currently Offered Pre-trade analytics – Currently Offered/Plan to Offer Direct feed to dealer inventory to buy-side portfolio – Currently Offered Electronic research delivery – Currently Offered Regulatory/compliance – Currently Offered Risk monitoring or management – Currently Offered Identity management – Currently Offered

### Automated Bond System (ABS)

New York Stock Exchange, Inc. Fixed Income Markets Division 20 Broad Street New York, New York 10005 1.212.656.7094 www.nyse.com

### Market:

Inter-Dealer

Platform Supports: Secondary market trading

Trading Method: Order driven Auction

### Market Participants Eligible/Not Eligible to Use Platform Directly:

Dealers as providers of liquidity – Eligible Dealers as consumers of liquidity – Eligible Institutional investors ("buy side") – Not Eligible Retail investors – Not Eligible

### Platform has dedicated liquidity providers or market makers.

### Platform does not have a minimum trade size.

## Information available to all trading system participants in real-time for trades executed on this platform:

Coupon	Issue size	Trade size
CUSIP/ISIN number	Maturity	Yield of trade
Historical trade data	Price of trade	
Issuer name	Rating	

### Products traded on the platform and the types of trade:

(U = US Products)	E = European Products		A = Asi	ian Products)
Product	Cash	Repo	Basis	Spread
Agency securities	UE			
Emerging markets	U			
High-grade corporate	UE			
High-yield corporate	UE			
Municipal securities	U			
Sovereign securities	E			
Treasury securities	U			

### Platform provides direct access to trade clearance and settlement functions through: DTCC

## Services other than price discovery/trade execution offered or plan to offer to users of the platform:

Confirmation/allocation – Currently Offered Order management – Currently Offered Pre-trade analytics – Currently Offered Regulatory/compliance – Currently Offered

### Axon

Axon Finance C.V. Fixed Income Markets Division Jan Slauerhoffstraat 32 NL 4207 RT Gorinchen The Netherlands +31 6 54954939 www.axonfinance.nl

### Market:

Issuer to dealer/investor

### **Platform Supports:**

Primary market new-issues

### **Trading Method:**

Request for quote

### Market Participants Eligible/Not Eligible to Use Platform Directly:

Dealers as providers of liquidity – Eligible Dealers as consumers of liquidity – Not Eligible Institutional investors ("buy side") –Eligible Retail investors – Not Eligible

### Platform has dedicated liquidity providers or market makers.

Platform does not have a minimum trade size.

Information available to all trading system participants in real-time for trades executed on this platform:

Historical trade data Issue size Price of trade

### Products traded on the platform and the types of trade:

(U = US Products)	E = European Products		A = A	Asian Products)
Product	Cas	h Re	epo Basis	s Spread
Whole loans (semi-go	vernment)		Ē	Ē

### Platform does not provide direct access to trade clearance and settlement functions.

Services other than price discovery/trade execution offered or plan to offer to users of the platform:

Order management – Currently Offered Direct feed or dealer inventory to buy-side portfolio – Plan to Offer Electronic Research delivery – Plan to Offer Regulatory/compliance – Currently Offer Risk management – Plan to Offer

### **Bank of Thailand (e-Bidding)**

273 Samson Road Bangkhunphron Bangkok 10200 Thailand 1.212.656.7094 (US) 066.2283.5353 www.bot.or.th

#### Market:

Issuer to dealer/investor Note: Ministry of Finance (issuer), commercial banks (investor) **Platform Supports:** 

Primary market new-issues

#### **Trading Method:**

Auction

#### Market Participants Eligible/Not Eligible to Use Platform Directly:

Dealers as providers of liquidity – Not Eligible Dealers as consumers of liquidity – Not Eligible Institutional investors ("buy side") – Eligible Retail investors – Not Eligible

### Platform does not have dedicated liquidity providers or market makers.

### Platform does not have a minimum trade size.

## Information available to all trading system participants in real-time for trades executed on this platform:

Coupon CUSIP/ISIN number Historical trade data Issuer name Issue size Maturity Yield of trade

### Products traded on the platform and the types of trade:

e-Bidding is used for auction of T-bills, government bond and Bank of Thailand bonds

### Platform does not provide direct access to trade clearance and settlement functions.

## Services other than price discovery/trade execution offered or plan to offer to users of the platform:

Confirmation/allocation – Currently Offered Order management – Currently Offered Regulatory/compliance – Currently Offered Identity management – Currently Offered

### **Barclays Bank (Bondscape)**

54 Lombard Street London EC3P 3AH United Kingdom 44.08702.426637 www.bondscape.net

### Market:

Multiple dealer-to-(buy-side) customer

### Platform Supports:

Secondary market trading

Trading Method: Order driven

### Market Participants Eligible/Not Eligible to Use Platform Directly:

Dealers as providers of liquidity –Not Eligible Dealers as consumers of liquidity – Not Eligible Institutional investors ("buy side") – Eligible Retail investors –Eligible

### Platform has dedicated liquidity providers or market makers.

### Platform does not have a minimum trade size.

## Information available to all trading system participants in real-time for trades executed on this platform:

Coupon	Maturity	Trade size
CUSIP/ISIN number	Price of trade	Yield of trade
Issuer name	Rating	Trade executed at bid or ask

#### Products traded on the platform and the types of trade:

(U = US Products)	E = European Products		A = As	ian Products)
Product	Cash	Repo	Basis	Spread
Agency securities	E			
High-grade corporate	E			
Sovereign securities	E			
Supranational securitie	s E			

### Platform does not provide direct access to trade clearance and settlement functions.

## Services other than price discovery/trade execution offered or plan to offer to users of the platform:

Pre-trade analytics – Currently Offered Electronic research delivery – Currently Offered

### Bear Stearns & Co., Inc.

383 Madison Avenue New York, New York 10179 1.212.272.2000 www.bearstearns.com

#### Market:

Inter-dealer Single dealer-to-(buy-side) customer Multiple dealer-to-(buy-side) customer Issuer to dealer/investor

#### **Platform Supports:**

Primary market new-issues and secondary market trading

### **Trading Method:**

Order driven Request for quote.

### Platform has a dedicated liquidity providers and market makers.

### Platform does not have a minimum trade size.

## Information available to all trading system participants in real-time for trades executed on this platform:

Coupon	Maturity	TRACE trade data
CUSIP/ISIN number	MSRB trade data	Trade size
Historical trade data	Price of trade	Yield of trade
Issue size	Rating	
Issuer name	Spread to benchmark	

### Products traded on the platform and the types of trade:

(U = US Products)	E = European Products		A = Asi	an Products)
Product	Cash	Repo	Basis	Spread
Agency MBS	U			U
Agency securities	U			U
Credit derivatives	U			U
Emerging markets	UE			UΕ
High-grade corporate	U A			U A
High-yield corporate	U A			А
Municipal securities	U			U
Sovereign securities	ΕA			ΕA
Supranational securitie	s UEA			U E A
Treasury securities	U			U

#### Platform supports trading in the following Asian sovereigns:

South Korea Philippines Malaysia Thailand

## Platform provides direct access to trade clearance and settlement functions through: DTCC

## Services other than price discovery/trade execution offered or plan to offer to users of the platform:

Confirmation/allocation – Currently Offered Order management – Currently Offered Electronic research delivery – Currently Offered

### **BEX (Bond Electronic Exchange)**

Fixed Income and Related Securities And Trading System (FIRSTs) 62 The Stock Exchange of Thailand Building 5<sup>th</sup> Floor Ratchadapisek Road Klongtoey, Bangkok 10110 Thailand 662.229.2789 www.bex.or.th/en/index.html

#### Market:

Multiple dealer-to-(buy-side) customer

### Platform Supports:

Secondary market trading

### Trading Method:

Order driven Request for quote.

#### Market Participants Eligible/Not Eligible to Use Platform Directly:

Dealers as providers of liquidity – Eligible Dealers as consumers of liquidity – Eligible Institutional investors ("buy side") – Eligible Retail Investors – Not Eligible

#### Platform does not have dedicated liquidity providers or market makers.

### Platform does not have a minimum trade size.

## Information available to all trading system participants in real-time for trades executed on this platform:

Coupon	Maturity	Trade size
CUSIP/ISIN number	Price of trade	Whether trade was executed at
Historical trade data	Rating	the bid or ask
Issue size	Spread to benchmark	Yield of trade
Issuer name	TRACE trade data	

### Products traded on the platform and the types of trade:

(U = US Products)	E = European Proc	lucts	A = Asi	ian Products)	)
Product	Cash	Repo	Basis	Spread	
Asian Bond Fund Tha	iland	-		-	
(ABFTH)	А				

Platform provides direct access to trade clearance and settlement functions through: Thailand Securities Depository (TSD)

### Trading platform is not compliant with FIX Protocol version 4.4.

## Services other than price discovery/trade execution offered or plan to offer to users of the platform:

Confirmation/allocation – Plan to Offer Order management – Plan to Offer Pre-trade analytics – Plan to Offer Direct feed of dealer inventory to buy-side portfolio – Currently Offered Electronic research delivery – Plan to Offer Regulatory/compliance – Currently Offered Risk monitoring or management – Plan to Offer Identity management – Currently Offered

### Blackbird

55 Broad Street, 8<sup>th</sup> Floor New York, New York 10004 1.212.609.4750 *www.blackbird.net* 

### Market:

Multiple dealer-to-(buy-side) customer

### **Platform Supports:**

Primary market new-issues and secondary market trading

### **Trading Method:**

Order driven Market-making or Cross-matching Request for quote. No limit in the number of quotes a customer may request for a single trade. Auction

### Market Participants Eligible/Not Eligible to Use Platform Directly:

Dealers as providers of liquidity – Eligible Dealers as consumers of liquidity – Eligible Institutional investors ("buy side") – Eligible Retail Investors – Not Eligible

### Platform does not have dedicated liquidity providers or market makers.

### Platform has a minimum trade size of \$25 million.

## Information available to all trading system participants in real-time and at the end of the day for trades executed on this platform:

Historical trade data	Trade size	Issue size
Price of trade	Whether trade was execu-	ted at the bid or ask

### Products traded on the platform and the types of trade:

(U = US Products)	E = European Products		A = Asi	an Products)
Product	Cash	Repo	Basis	Spread
Agency MBS	U	U	U	U
Credit derivatives	U E A	U E A	U E A	U E A
Futures	U E A	U E A	U E A	U E A
Interest rate swaps	U E A	U E A	U E A	U E A
MBS	ΕA	ΕA	ΕA	ΕA
Non-agency MBS	U	U	U	U

### Platform provides direct access to trade clearance and settlement functions.

#### Trading platform is compliant with FIX Protocol version 4.4.

Services other than price discovery/trade execution offered or plan to offer to users of the platform:

Confirmation/allocation – Currently Offered Order management – Currently Offered Pre-trade analytics – Currently Offered Direct feed to dealer inventory to buy-side portfolio – Currently Offered Electronic research delivery – Currently Offered Regulatory/compliance – Currently Offered Risk monitoring or management – Currently Offered Identity management – Currently Offered

### Bloomberg

731 Lexington Avenue New York, New York 10022 1.212.318.2000 www.bloomberg.com

Bloomberg includes the following fixed-income platforms:

### **Bloomberg All Q**<sup>1</sup>

### **Bloomberg Bond Trader**

### **Bloomberg Money Markets Platforms**

<sup>1</sup>Dealers may post executable prices on the Bloomberg All Q function, but it is not considered a platform.

#### Market:

Inter-Dealer Single dealer-to-(buy-side) customer Multiple dealer-to-(buy-side) customer Issuer to dealer/investor

### Platform Supports:

Primary market new-issues and secondary market trading

### **Trading Method:**

Order driven Request for quote. Maximum number of quotes a customer may request for a single trade is 5. Auction

#### Market Participants Eligible/Not Eligible to Use Platform Directly:

Dealers as providers of liquidity – Eligible Dealers as consumers of liquidity – Eligible Institutional investors ("buy side") – Eligible Retail investors – Not Eligible

### Platform has dedicated liquidity providers or market makers.

### Platform does not have a minimum trade size.

## Information available to all trading system participants in real-time for trades executed on this platform:

Coupon	Maturity	TRACE trade data
CUSIP/ISIN number	MSRB trade data	Trade size
Historical trade data	Price of trade	Yield of trade
Issue size	Rating	
Issuer name	Spread to benchmark	

### Products traded on the platform and the types of trade:

(U = US Products)	E = European Prod	ropean Products		A = Asian Products)	
Product	Cash	Repo	Basis	Spread	
Agency securities	U E A	UΕ		U E A	
Commercial paper	UΕ				
Credit derivatives	UΕ				
Emerging markets	UE	Е		UΕ	
Futures	UE				
High-grade corporate	UE	UΕ		UΕ	
High-grade yield	UE	UΕ		UΕ	
Interest rate swaps	UE				
Other money market	UΕ				
Pfandbriefe/covered bo	onds E	Е		Е	
Sovereign securities	ΕA	Е		ΕA	
Sub-sovereign securitie	es E	Е		Е	
Supranational securities		UΕ		U E A	
Treasury securities	U	U		U	

#### Platform supports trading in the following European sovereigns:

Austria	Germany	Italy
Belgium	Poland	Norway
Czech Republic	Portugal	Spain
Denmark	Greece	Sweden
Finland	Hungary	The Netherlands
France	Ireland	United Kingdom

### Platform supports trading in the following Asian sovereigns:

Australia	Philippines	Sri Lanka
Japan	Singapore	
Jupun	Singapore	

Platform provides direct access to trade clearance and settlement functions through: Omgeo DTCC

### Trading platform is compliant with FIX Protocol version 4.4.

## Services other than price discovery/trade execution offered or plan to offer to users of the platform:

Confirmation/allocation – Currently Offered Order management – Currently Offered Pre-trade analytics – Currently Offered Direct feed to dealer inventory to buy-side portfolio – Currently Offered Electronic research delivery – Currently Offered Risk monitoring or management – Currently Offered Identity management – Currently Offered

### **BondDesk Group**

One Lovell Avenue Mill Valley, California 94941 1.877.266.3922 or BondDesk Trading, LLC 399 Park Avenue, 39<sup>th</sup> Floor New York, New York 10022 *www.bonddeskgroup.com* 

### Market:

Inter-Dealer

### **Platform Supports:**

Primary market new-issues and secondary market trading

### **Trading Method:**

Market-making or Cross-matching

### Market Participants Eligible/Not Eligible to Use Platform Directly:

Dealers as providers of liquidity – Eligible Dealers as consumers of liquidity – Eligible Institutional investors ("buy side") – Not Eligible Retail investors – Not Eligible

### Platform has dedicated liquidity providers or market makers.

### Platform does not have a minimum trade size.

## Information available to all trading system participants in real-time for trades executed on this platform:

Coupon	Maturity	TRACE trade data
CUSIP/ISIN number	MSRB trade data	Trade size
Historical trade data	Price of trade	Yield of trade
Issue size	Rating	
Issuer name	Spread to benchmark	

### Products traded on the platform and the types of trade:

(U = US Products)	E = European Products		A = Asian Products)	
Product	Cash	Repo	Basis	Spread
ABS		-		Ū
Agency MBS				U
High-grade corporate				U
High-yield corporate				U
Municipal securities				U

Products traded on the platform and the types of trade (continued):
---------------------------------------------------------------------

Product	Cash	Repo	Basis	Spread
Non-agency MBS		-		Ū
Supranational securities				U
Treasury securities				U

Platform provides direct access to trade clearance and settlement functions.

### Trading platform is compliant with FIX Protocol version 4.4.

## Services other than price discovery/trade execution offered or plan to offer to users of the platform:

Confirmation/allocation – Currently Offered Order management – Currently Offered Pre-trade analytics – Currently Offered Direct feed to dealer inventory to buy-side portfolio – Currently Offered Electronic research delivery – Currently Offered Regulatory/compliance – Currently Offered Risk monitoring or management – Currently Offered Identity management – Currently Offered

### Bondpage.com

Cambridge Group Investments, Ltd. 4660 S. Hagadorn Road, Suite 520 East Lansing, Michigan 48823 1.800.795.4648 www.bondpage.com

### Market:

Single dealer-to-(buy-side) customer

#### **Platform Supports:**

Primary market new-issues and secondary market trading

### Market Participants Eligible/Not Eligible to Use Platform Directly:

Dealers as providers of liquidity – Eligible Dealers as consumers of liquidity – Eligible Institutional investors ("buy side") – Eligible Retail investors – Eligible

### Platform has dedicated liquidity providers or market makers.

#### Platform has no minimum trade size.

## Information available to all trading system participants in real time for trades executed on this platform:

Coupon CUSIP/ISIN number Issuer name Issue size Maturity Price of trade Rating Trade size Yield of trade MSRB TRACE

icts traded on the platorn and the types of trade.					
(U = US Products)	E = European Products		A = Asian Products)		
Product	Cash	Repo	Basis	Spread	
ABS		-		U	
Agency MBS				U	
Agency securities				U	
Commercial paper				U	
Emerging markets				U	
High-grade corporate				U	
High-yield corporate				U	
Municipal securities				U	
Non-agency MBS				U	
Other money market				U	
Treasury securities				U	

### Products traded on the platform and the types of trade:

Platform does not provide direct access to trade clearance and settlement functions.

### **Bondscape.net**

#### Market:

Multiple dealer-to-(buy-side) customer

### **Platform Supports:**

Secondary market trading

### **Trading Method:**

Order driven

### Market Participants Eligible/Not Eligible to Use Platform Directly:

Dealers as providers of liquidity –Not Eligible Dealers as consumers of liquidity – Eligible Institutional investors ("buy side") – Eligible Retail investors – Not Eligible

### Platform has dedicated liquidity providers or market makers.

#### Platform does not have a minimum trade size.

## Information available to all trading system participants in real-time for trades executed on this platform:

Coupon CUSIP/ISIN number Issuer name Maturity Price of trade Rating Trade size Whether trade was executed at the bid or ask Yield of trade

### Products traded on the platform and the types of trade:

(U = US Products)	E = European Proc	A = Asian Products)		
Product	Cash	Repo	Basis	Spread
Agency securities	E			
High-grade corporate	E			
Sovereign securities	E			
Supranational securitie	s E			

Platform does not provide direct access to trade clearance and settlement functions.

Trading platform is not compliant with FIX Protocol version 4.4.

Services other than price discovery/trade execution offered or plan to offer to users of the platform:

Pre-trade analytics – Currently Offered Electronic research delivery – Currently Offered

### **BondVision**

Piazza Paolo Ferrari, 8 20121 Milan Italy 39.02.80235.201 Fax: 39.02.80235.200 www.bondvision.net

#### Market:

Multiple dealer-to-(buy-side) customer

#### Platform Supports:

Secondary market trading

#### **Trading Method:**

Request for quote. Maximum number of quotes a customer may request for a single trade is four.

#### Market Participants Eligible/Not Eligible to Use Platform Directly:

Dealers as providers of liquidity – Eligible Dealers as consumers of liquidity – Not Eligible Institutional investors ("buy side") – Eligible Retail investors – Not Eligible

#### Platform has dedicated liquidity providers or market makers.

#### Platform has a minimum trade size of €100,000 for sovereigns.

## Information available to all trading system participants in real-time for trades executed on this platform:

Coupon CUSIP/ISIN number Historical trade data Issuer name Maturity Price of trade Rating Yield of trade

#### Products traded on the platform and the types of trade:

(U = US Products)	E = European Pro	ducts	A = Asi	ian Products)
Product	Cash	Repo	Basis	Spread
ABS	E	-		-
Agency securities	UE			
ETFs	Е			
Emerging Markets	Е			
High-grade corporate	E			
MBS	Е			
Other Money Market	E			
Pfandbriefe/covered bc	onds E			
Sovereign securities	Е			
Sub-sovereign securitie	es E			
Supranational securitie	s U E			
Treasury securities	U			

#### Platform supports trading in the following European sovereigns:

Austria	France	Poland
Belgium	Germany	Portugal
Bulgaria	Greece	Romania
Croatia	Hungary	Slovakia
Cyprus	Ireland	Slovenia
Czech Republic	Italy	Spain
Denmark	Lithuania	Turkey
Finland	The Netherlands	

#### Platform does not provide direct access to trade clearance and settlement functions.

#### Trading platform is compliant with FIX Protocol version 4.4.

### Services other than price discovery/trade execution offered or plan to offer to users of the platform:

Confirmation/allocation – Currently Offered Order management – Currently Offered

### BondWave

1001 Warrenville Road Suite 407 Lisle, Illinois 60532 1.877.795.6288 www.bondwave.com

#### Market:

Inter-Dealer Issuer to dealer/investor

#### **Platform Supports:**

Primary market new-issues and secondary market trading

#### **Trading Method:**

Order driven

#### Market Participants Eligible/Not Eligible to Use Platform Directly:

Dealers as providers of liquidity – Eligible Dealers as consumers of liquidity – Eligible Institutional investors ("buy side") – Eligible Retail investors – Not Eligible

#### Platform has dedicated liquidity providers or market makers.

#### Platform does not have a minimum trade size.

## Information available to all trading system participants with a delay for trades executed on this platform:

Coupon	Issuer name	Rating
CUSIP/ISIN number	Maturity	Spread to benchmark
Historical trade data	MSRB trade data	Trade size
Issue size	Price of trade	Yield of trade

#### Products traded on the platform and the types of trade:

(U = US Products)	E = European Produc	A = Asi	an Products)	
Product	Cash	Repo	Basis	Spread
Municipal securities	U	-		•

#### Platform does not provide direct access to trade clearance and settlement functions.

#### Trading platform is not compliant with FIX Protocol version 4.4.

## Services other than price discovery/trade execution offered or plan to offer to users of the platform:

Confirmation allocation – Currently Offered Order management – Currently Offered Pre-trade analytics – Currently Offered Direct feed to dealer inventory to buy-side portfolio – Currently Offered Electronic research delivery – Currently Offered Regulatory/compliance – Currently Offered Risk monitoring or management – Currently Offered Identity management – Currently Offered

### BondWeb

7525 SE 24<sup>th</sup> Street, Suite 495 Mercer Island, Washington 98040 1.206.548.0071 www.bondweb.com

#### Market:

Inter-Dealer Multiple dealer-to-(buy-side) customer

#### **Platform Supports:**

Primary market new-issues and secondary market trading

#### **Trading Method:**

Market-making or Cross-matching

Request for quote. No limit in the number of quotes a customer may request for a single trade.

#### Market Participants Eligible/Not Eligible to Use Platform Directly:

Dealers as providers of liquidity – Eligible Dealers as consumers of liquidity – Eligible Institutional investors ("buy side") – Eligible Retail investors – Not Eligible

Platform has dedicated liquidity providers or market makers.

#### Platform does not have a minimum trade size.

### Information available to all trading system participants in real-time for trades executed on this platform:

Coupon	Maturity	Spread to benchmark
CUSIP/ISIN number	Price of trade	Trade size
Issue size	Rating	Yield of trade

#### Products traded on the platform and the types of trade:

(U = US Products)	E = European Prod	A = Asian Products)		
Product	Cash	Repo	Basis	Spread
Agency MBS	U	-	U	Ū
Non-agency MBS	U		U	U

#### Platform does not provide direct access to trade clearance and settlement functions.

#### Trading platform is not compliant with FIX Protocol version 4.4.

### Services other than price discovery/trade execution offered or plan to offer to users of the platform:

Confirmation/allocation – Currently Offered Order management – Plan to Offer Pre-trade analytics – Currently Offered Direct feed to dealer inventory to buy-side portfolio – Plan to Offer Electronic research delivery – Plan to Offer Regulatory/compliance – Plan to Offer Risk monitoring or management – Plan to Offer Identity management – Plan to Offer

### CanDeal

The Exchange Tower 130 King Street West 3rd Floor, Suite 540 Toronto, Ontario Canada M5X 1J2 1.416.814.7800 www.candeal.ca

#### Market:

Multiple dealer-to-(buy-side) customer

Platform Supports: Secondary market trading

#### Trading Method:

Request for quote. Maximum number of quotes a customer may request for a single trade is 4.

#### Market Participants Eligible/Not Eligible to Use Platform Directly:

Dealers as providers of liquidity – Eligible Dealers as consumers of liquidity – Not Eligible Institutional investors ("buy side") – Eligible Retail investors – Not Eligible

#### Platform has dedicated liquidity providers or market makers.

#### Platform does not have a minimum trade size.

## Information available to all trading system participants in real-time for trades executed on this platform:

CouponMaturityIssuer nameSpread to benchmark

#### Products traded on the platform and the types of trade:

(U = US Products)	E = Europe	ean Produc	ts A =	Asian Pr	oducts	X = Other)
Product		Cash	Repo	Basis	Spread	<u>l</u>
Other: Canadian gov	vernment,		-		-	
Agency & provir	ncial	Х			Х	
Other money man	rkets	Х				

Platform does provide direct access to trade clearance and settlement functions through Custodial Agents.

Trading platform is compliant with FIX Protocol version 4.4 and supports FIX 4.4, FIX 4.2 and SML integration interfaces.

## Services other than price discovery/trade execution offered or plan to offer to users of the platform:

Confirmation/allocation – Currently Offered Order management – Currently Offered Pre-trade analytics – Currently Offered Direct feed to dealer inventory to buy-side portfolio – Currently Offered Electronic research delivery – Currently Offered Regulatory/compliance – Currently Offered Risk monitoring or management – Plan to Offer Identity management – Currently Offered

### Chapdelaine & Co.

One Seaport Plaza, 17<sup>th</sup> Floor New York, New York 10038 1.212.208.9000 www.chappy.com

#### Market:

Inter-Dealer Multiple dealer-to-(buy-side) customer

#### **Platform Supports:**

Primary market new-issues and secondary market trading

#### **Trading Method:**

Market-making or Cross-matching

#### Market Participants Eligible/Not Eligible to Use Platform Directly:

Dealers as providers of liquidity – Eligible Dealers as consumers of liquidity – Eligible Institutional investors ("buy side") – Not Eligible Retail investors – Not Eligible

#### Platform has dedicated liquidity providers or market makers.

#### Platform does not have a minimum trade size.

## Information available to all trading system participants with a delay for trades executed on this platform:

Coupon	Price of trade
CUSIP/ISIN number	Rating
Historical trade data	Spread to benchmark
Issuer name	Trade size
Maturity	Whether trade was executed at the bid or ask
MSRB trade data	Yield of trade

#### Products traded on the platform and the types of trade:

(U = US Products)	E = European Prod	A = Asi	ian Products)	
Product	Cash	Repo	Basis	Spread
Municipal securities	U	-		

#### Platform provides direct access to trade clearance and settlement functions through: DTCC NSCC

## Services other than price discovery/trade execution offered or plan to offer to users of the platform:

Confirmation/allocation – Currently Offered Pre-trade analytics – Currently Offered

### **Chicago Board of Trade (CBOT)**

141 West Jackson Boulevard Chicago, Illinois 60604-2994 1.312.435.3500 www.cbot.com

#### Market:

Inter-Dealer Single dealer-to-(buy-side) customer Multiple dealer-to-(buy-side) customer Issuer to dealer/investor

#### Platform Supports:

Secondary market trading

#### **Trading Method:**

Order driven Market-making or Cross-matching Request for quote

#### Market Participants Eligible/Not Eligible to Use Platform Directly:

Dealers as providers of liquidity – Eligible Dealers as consumers of liquidity – Eligible Institutional investors ("buy side") – Eligible Retail investors – Eligible

#### Platform has dedicated liquidity providers or market makers.

#### Platform has a minimum trade size of one contract.

## Information available to all trading system participants in real-time for trades executed on this platform:

Price of trade

#### Products traded on the platform and the types of trade:

(U = US Products	E = European Products			A = Asian Products)		
Product	(	Cash	Repo	Basis	Spread	
Exchange-traded optio	ns	U			Ū	
Futures	1	U			U	

#### Platform does not provide direct access to trade clearance and settlement functions.

#### Trading platform is not compliant with FIX Protocol version 4.4.

## Services other than price discovery/trade execution offered or plan to offer to users of the platform:

Confirmation/allocation – Currently Offered Order management – Currently Offered Risk monitoring or management – Currently Offered

### creditex

26 West 17th Street, 4th Floor New York, New York 10011 1.212.633.7277 www.creditex.com

#### Market:

Inter-Dealer

#### Trading Method:

Order driven Auction

#### Market Participants Eligible/Not Eligible to Use Platform Directly:

Dealers as providers of liquidity – Eligible Dealers as consumers of liquidity – Eligible Institutional investors – Not Eligible Retail investors – Not Eligible

#### Platform does not have dedicated liquidity providers or market makers.

#### Platform has a minimum trade size of \$5 million.

## Information available to all trading system participants in real-time for trades executed on this platform:

Coupon	Maturity
CUSIP/ISIN number	Price of trade
Historical trade data	Rating
Issue size	Trade size
Issuer name	Whether trade was executed at the bid or ask

#### Products traded on the platform and the types of trade:

(U = US Products	E = European Products		A = Asi	ian Products)
Product	Cash	Repo	Basis	Spread
Credit derivatives		*		ŪΕΑ

#### Platform supports trading in the following European sovereigns:

Austria	Greece	Portugal
Belgium	Hungary	Romania
Bulgaria	Iceland	Russian Federation
Croatia	Ireland	Slovakia
Czech Republic	Italy	Slovenia
Denmark	Kazakhstan	Spain
Estonia	Latvia	Sweden
Finland	Lithuania	The Netherlands
France	Norway	Turkey
Germany	Poland	Ukraine

#### Platform supports trading in the following Asian sovereigns:

China	Indonesia	Philippines Vietnam
Korea	Malaysia	Thailand

Platform does not provide direct access to trade clearance and settlement functions.

Trading platform is not compliant with FIX Protocol version 4.4.

Services other than price discovery/trade execution offered or plan to offer to users of the platform:

Order management – Currently Offered Pre-trade analytics – Currently Offered

### **Credit Suisse First Boston LLC**

11 Madison Avenue New York, New York 10010-3629 1.212.325.2000 www.csfb.com

#### Market:

Single dealer-to-(buy-side) customer

#### **Platform Supports:**

Secondary market trading

#### **Trading Method:**

Request for quote.

#### Market Participants Eligible/Not Eligible to Use Platform Directly:

Dealers as providers of liquidity – Not Eligible Dealers as consumers of liquidity – Not Eligible Institutional investors ("buy side") – Eligible Retail investors – Eligible

#### Platform does not have dedicated liquidity providers nor market makers.

#### Platform does not have a minimum trade size.

# Information available to all trading system participants in real-time for trades executed on this platform:

Coupon	Price of trade
CUSIP/ISIN number	Rating
Historical trade data	Spread to benchmark
Issue size	Trade size
Issuer name	Whether trade was executed at the bid or ask
Maturity	Yield of trade

#### Products traded on the platform and the types of trade:

(U = US Products)	E = European Pro	ducts	A = As	ian Products)
Product	Cash	Repo	Basis	Spread
Agency securities	UE			
Emerging markets	UE			
ETFs	E			
Exchange-traded option	ns UEA			

#### Products traded on the platform and the types of trade:

Cash	Repo	Basis	Spread
U E A			
Е			
E			
E			
ΕA	Е		
E			
U			
UΕ			
	UEA E E E A E U	UEA E E EA E U	UEA E E E E A E U

#### Platform supports trading in the following European sovereigns:

Austria	Germany	Spain
Belgium	Greece	Sweden
Denmark	Ireland	The Netherlands
Estonia	Italy	United Kingdom
Finland	Luxembourg	
France	Portugal	

#### Platform supports trading in the following Asian sovereigns:

Japan

Platform does not provide direct access to trade clearance and settlement functions for cash products only.

Trading platform is compliant with FIX Protocol version 4.4 and support FIX 4.4, FIX 4.2 and Ntive API integration interfaces.

## Services other than price discovery/trade execution offered or plan to offer to users of the platform:

Pre-trade analytics – Currently Offered Risk monitoring or management – Currently Offered Identity management – Currently Offered

### CreditTrade

No. 1 London Bridge, 6<sup>th</sup> Floor London SE1 9BG United Kingdom 44.(0)20.7098.1600 www.credittrade.com

#### Market:

Inter-Dealer

#### **Platform Supports:**

Secondary market trading

#### **Trading Method:**

Market-making or cross-matching

#### Market Participants Eligible/Not Eligible to Use Platform Directly:

Dealers as providers of liquidity – Eligible Dealers as consumers of liquidity – Eligible Institutional investors ("buy side") – Not Eligible Retail investors – Not Eligible

#### Platform has dedicated liquidity providers or market makers.

#### Platform has a minimum trade size of \$1 million.

## Information available to all trading system participants in real-time for trades executed on this platform:

Coupon	Maturity
CUSIP/ISIN number	Price of trade
Historical trade data	Trade size
Issuer name	Whether trade was executed at the bid or ask
Issue size	

#### Products traded on the platform and the types of trade:

(U = US Products)	E = European Products		E = European Products $A = Asian H$		ian Products)
Product	Cash	Repo	Basis	Spread	
Credit derivatives		-		ŪΕΑ	
High-grade corporate				Е	

#### Platform does not provide direct access to trade clearance and settlement functions.

Trading platform is not compliant with FIX Protocol version 4.4.

### dbconvertibles.com

Deutsche Bank AG, London 1 Great Winchester Street London EC2N 2EQ United Kingdom 44.20.7545.2362 www.dbconvertibles.com

#### Market:

Single dealer-to-(buy-side) customer

#### Platform Supports:

Secondary market trading

#### **Trading Method:**

Request for quote

#### Market Participants Eligible/Not Eligible to Use Platform Directly:

Dealers as providers of liquidity – Not Eligible Dealers as consumers of liquidity – Not Eligible Institutional investors ("buy side") – Eligible Retail investors – Not Eligible Platform does not have a dedicated liquidity provider or market maker.

Platform does not have a minimum trade size.

Information available to all trac	ling system participant	s:
Coupon CUSIP/ISIN number	Issue size Issuer name	Maturity Rating
Products traded on the platfor	m and the types of trade	e:

E = European Products		A = Asi	an Products	)
Cash	Repo	Basis	Spread	
Е				
E				
	E = European Proc Cash E	E = European Products Cash Repo E	E = European Products A = Asi Cash Repo Basis E	E = European Products A = Asian Products Cash Repo Basis Spread E

Platform does not provide direct access to trade clearance and settlement functions.

Trading platform is not compliant with FIX Protocol version 4.4.

Services other than price discovery/trade execution offered or plan to offer to users of the platform:

Pre-trade analytics – Currently Offered Electronic research delivery – Currently Offered

### **Debtdomain.com**

410 Park Avenue, 15<sup>th</sup> Floor New York, New York 10022 1.212.231.8121 www.debtdomain.com

#### Market:

Inter-Dealer Single dealer-to-(buy-side) customer Multiple dealer-to-(buy-side) customer

#### Platform Supports:

Primary market new-issues and secondary market trading

#### **Trading Method:**

Order driven Market-making or cross-matching Request for quote

#### Market Participants Eligible/Not Eligible to Use Platform Directly:

Dealers as providers of liquidity – Eligible Dealers as consumers of liquidity – Eligible Institutional investors ("buy side") – Eligible Retail investors – Eligible

#### Platform has dedicated liquidity providers or market makers.

#### Platform does not have a minimum trade size.

## Information available to all trading system participants in real-time for trades executed on this platform:

Coupon	Issuer name	Trade size
Historical trade data	Maturity	Yield of trade
Issue size	Price of trade	

#### Products traded on the platform and the types of trade:

(U = US Products	E = European Products		A = Asian Products)	
Product	Cash I	Repo	Basis	Spread
Emerging markets	U E A	-		-
Whole loans	U E A			

#### Platform does not provide direct access to trade clearance and settlement functions.

Trading platform is not compliant with FIX Protocol version 4.4.

## Services other than price discovery/trade execution offered or plan to offer to users of the platform:

Confirmation/allocation – Currently Offered Order management –Currently Offered Regulatory/compliance – Currently Offered

### eSpeed, Inc.

110 East 59<sup>th</sup> Street New York, New York 10022 1.212.610.2200 www.espeed.com

#### Market:

Inter-Dealer

#### **Platform Supports:**

Primary market new-issues

#### Trading Method:

Order driven

#### Market Participants Eligible/Not Eligible to Use Platform Directly:

Dealers as providers of liquidity – Eligible Dealers as consumers of liquidity – Eligible Institutional investors ("buy side") – Not Eligible Retail investors – Not Eligible

#### Platform does not have dedicated liquidity providers or market makers.

Platform has a minimum trade size of \$1 million.

## Information available to all trading system participants in real-time for trades executed on this platform:

Coupon	Spread to benchmark
CUSIP/ISIN number	Trade size
Maturity	Whether trade was executed at the bid or ask
Price of trade	Yield of trade

#### Products traded on the platform and the types of trade:

E = Euro	opean Prod	lucts	A = As	ian Products)
	Cash	Repo	Basis	Spread
	UΕ	U		-
	UΕ		U	
	UΕ			
irities	UΕ			
	ΕA			
es	E			
		U	U	U
	E = Euro urities es	Cash U E U E U E U E U E E A	UE U $UE U$ $UE$ $UE$ $EA$ es E	$\begin{array}{c ccc} Cash & Repo & Basis \\ U E & U \\ U E & U \\ U E & U \\ U E \\ rities & U E \\ E A \\ es & E \\ \end{array}$

#### Platform supports trading in the following Asian sovereigns:

Japanese government bonds

Platform provides direct access to trade clearance and settlement functions through: FICC

#### Trading platform is not compliant with FIX Protocol version 4.4.

### Services other than price discovery/trade execution offered or plan to offer to users of the platform:

Confirmation/allocation – Currently Offered Order management – Currently Offered Pre-trade analytics – Currently Offered Identity management – Currently Offered

### Eurex

D-60485 Frankfurt/Main Germany 49.(0).69.211.0 www.eurexchange.com

#### Market:

Multiple dealer-to-(buy-side) customer

#### **Trading Method:**

Order driven Market-making or Cross-matching Request for quote

#### Market Participants Eligible/Not Eligible to Use Platform Directly:

Dealers as providers of liquidity – Eligible Dealers as consumers of liquidity – Eligible Institutional investors ("buy side") – Eligible Retail investors – Not Eligible

#### Platform has dedicated liquidity providers or market makers.

#### Platform does not have a minimum trade size.

### Information available to all trading system participants in real-time for trades executed on this platform:

Coupon	Historical trade data	Price of trade
CUSIP/ISIN number	Maturity	Trade size

#### Products traded on the platform and the types of trade:

(U = US Products)	E = Europe	E = European Products		A = Asian Products	
Product		Cash	Repo	Basis	Spread
Agency securities				Е	
ETFs				Е	
Exchange-traded optic	ons			Е	
Futures				UΕ	
Interest rate swaps				Е	
OTC options				Е	
Pfandbriefe/covered b	onds			Е	
Sovereign securities				Е	
Supranational securitie	es			Е	
Treasury securities				U	

#### Platform provides direct access to trade clearance and settlement functions through: Eurex Clearing AG

## Trading platform is compliant with FIX Protocol version 4.4, supports FIX 4.4 and FIX 4.2 integration interfaces.

## Services other than price discovery/trade execution offered or plan to offer to users of the platform:

Confirmation/allocation – Currently Offered Order management – Currently Offered

### **Eurex Bonds GmbH**

D-60485 Frankfurt/Main Germany 49.(0)69.211.11.222 www.eurex-bonds.com

#### Market:

Inter-Dealer

#### Platform Supports:

Secondary market trading

#### Trading Method:

Order driven Market-making or Cross-matching

#### Market Participants Eligible/Not Eligible to Use Platform Directly:

Dealers as providers of liquidity – Eligible Dealers as consumers of liquidity – Eligible Institutional investors ("buy side") – Not Eligible Retail investors – Not Eligible

#### Platform has dedicated liquidity providers or market makers.

#### Platform has a minimum trade size of €1 million.

## Information available to all trading system participants in real-time for trades executed on this platform:

Coupon	Issuer name	Trade size
CUSIP/ISIN number	Maturity	Yield of trade
Historical trade data	Price of trade	

#### Products traded on the platform and the types of trade:

(U = US Products)	E = European Products		cts	A = Asian Products	
Product		Cash	Repo	Basis	Spread
Agency securities	ł	Ξ			
Inflation linked bonds	I	Ξ			
Other money market	I	Ξ			
Pfandbriefe/covered bo	onds I	Ξ			
Sovereign securities	I	Ξ		Е	
Sub-sovereign securitie	es I	Ξ			
Supranational securitie	s I	Ξ			

#### Platform supports trading in the following European sovereigns:

The Netherlands

Platform provides direct access to trade clearance and settlement functions through: Eurex Clearing AG

#### Trading platform is not compliant with FIX Protocol version 4.4.

### Services other than price discovery/trade execution offered or plan to offer to users of the platform:

Confirmation/allocation – Currently Offered Order management – Currently Offered Risk monitoring or management – Currently Offered

### **Eurex Repo GmbH**

D-60485 Frankfurt/Main Germany 44.69.2102.5741 www.eurexrepo.com

#### Market:

Inter-Dealer

#### Platform Supports:

Secondary market trading

#### Trading Method:

Order driven

#### Market Participants Eligible/Not Eligible to Use Platform Directly:

Dealers as providers of liquidity – Eligible Dealers as consumers of liquidity – Eligible Institutional investors ("buy side") – Not Eligible Retail investors – Not Eligible

Platform does not have dedicated liquidity providers or market makers.

#### Platform has a minimum trade size of \$1 million.

## Information available to all trading system participants in real-time for trades executed on this platform:

CUSIP/ISIN number Price Maturity Tra

Price of trade Trade size

#### Products traded on the platform and the types of trade:

(U = US Products	E = European Products		A = Asian Products	
Product	Cash	Repo	Basis	Spread
Agency securities		Е		
Pfandbriefe/covered b	onds	Е		
Sovereign securities		Е		
Sub-sovereign securiti	es	Е		

#### Platform supports trading in the following European sovereigns:

Austria

Germany Switzerland

#### Platform provides direct access to trade clearance and settlement functions through: Eurex Clearing AG

### Trading platform is not compliant with FIX Protocol version 4.4, however, supports XML integration interfaces.

## Services other than price discovery/trade execution offered or plan to offer to users of the platform:

Confirmation/allocation – Currently Offered Identity management – Currently Offered

### **Eurex U.S.**

233 South Wacker Drive, Suite 2450 Chicago, Illinois 60606 1.312.544.1144 www.eurexchange.com

#### Market:

Multiple dealer-to-(buy-side) customer

#### Platform Supports:

Secondary market trading

#### **Trading Method:**

Order driven Market-making or Cross-matching Request for quote. No limit in the number of quotes a customer may request for a single trade. Auction

#### Market Participants Eligible/Not Eligible to Use Platform Directly:

Dealers as providers of liquidity – Eligible Dealers as consumers of liquidity – Eligible Institutional investors ("buy side") – Eligible Retail investors – Eligible

#### Platform has dedicated liquidity providers or market makers.

#### Platform does not have a minimum trade size.

Information available to all trading system participants in real-time for trades executed on this platform:

Issue size	Price of trade
Maturity	Trade size

#### Products traded on the platform and the types of trade:

(U = US Products)	E = European Products		A = Asi	ian Products)
Product	Cash	Repo	Basis	Spread
Futures	U E A			
FX	U E A			

Platform provides direct access to trade clearance and settlement functions through: The Clearing Corporation

#### Trading platform is not compliant with FIX Protocol version 4.4.

## Services other than price discovery/trade execution offered or plan to offer to users of the platform:

Confirmation/allocation – Currently Offered Electronic research delivery – Currently Offered Regulatory/compliance – Currently Offered

### **FTN Financial**

10 Exchange Place Jersey City, New Jersey 07302 1.201.309.4581 www.ftnbond.com

#### Market:

Multiple dealer-to-(buy-side) customer

#### **Platform Supports:**

Secondary market trading

#### Trading Method:

Order driven Market-making or Cross-matching Request for quote.

#### Market Participants Eligible/Not Eligible to Use Platform Directly:

Dealers as providers of liquidity – Not Eligible Dealers as consumers of liquidity – Eligible Institutional investors ("buy side") – Eligible Retail investors – Not Eligible

#### Platform does not have dedicated liquidity providers or market makers.

#### Platform does not have a minimum trade size.

## Information available to all trading system participants in real-time for trades executed on this platform:

Coupon	Issuer name	Rating
CUSIP/ISIN number	Maturity	Spread to benchmark
Issue size	Price of trade	Yield of trade

#### Products traded on the platform and the types of trade:

(U = US Products)	E = European Products		A = Asian Products)		
Product	Cash	Repo	Basis	Spread	
Agency securities	U	-		-	
High-grade corporate	U	High-y	vield corp	orate	U
Municipal securities	U				
Treasury securities	U				

#### Platform does not provide direct access to trade clearance and settlement functions.

Trading platform is not compliant with FIX Protocol version 4.4.

### **GFI Group**

100 Wall Street New York, New York 10005 1.212.968.4100 www.gfigroup.com

Market:

Inter-Dealer

#### **Platform Supports:**

Secondary market trading

#### **Trading Method:**

Market-making or Cross-matching

#### Market Participants Eligible/Not Eligible to Use Platform Directly:

Dealers as providers of liquidity – Eligible Dealers as consumers of liquidity – Eligible Institutional investors ("buy side") – Not Eligible Retail investors – Not Eligible

#### Platform has dedicated liquidity providers or market makers.

#### Platform has a minimum trade size of \$1 million.

## Information available to all trading system participants in real-time for trades executed on this platform:

CouponPrice of tradeCUSIP/ISIN numberSpread to benchmarkHistorical trade dataTrade sizeIssuer nameWhether trade was executed at the bid or askMaturityKetter trade was executed at the bid or ask

#### Products traded on the platform and the types of trade:

(U = US Products)	E = European Pro	oducts	A = Asi	an Products)
Product	Cash	Repo	Basis	Spread
Agency Securities				Ē
Asset-backed securities	Е			
CDS index tranches	UEA	A		
Credit derivatives	UEA	A		
Emerging markets	UA			
High-grade corporate	А			UE
High-yield corporate	UA			
Mortgage-backed securi	ties E			
Sovereign securities				Е
Sub-sovereign	Е			
Supranational securities				Е
Other: OTC CDS index	options E			
Other: Loan CDS single	name			
and IDX	Е			

#### Platform supports trading in the following European sovereigns:

Austria	
Denmark	
Finland	
Germany	

Greece Hungary Ireland Italy Northern Ireland Spain Sweden United Kingdom

#### Platform supports trading in the following Asian sovereigns:

China (cds)	Korea (cds)	Singapore (cds)
Hong Kong (cds)	Malaysia (cds)	Taiwan (cds)
India (cds)	Pakistan (cds)	Thailand (cds)
Indonesia (cds)	Philipines (cds)	Vietnam (cds)

Platform does not provide direct access to trade clearance and settlement functions.

#### Trading platform is not compliant with FIX Protocol version 4.4.

## Services other than price discovery/trade execution offered or plan to offer to users of the platform:

Confirmation/allocation – Currently Offered Order management – Currently Offered Pre-trade analytics – Currently Offered Regulatory/compliance – Currently Offered Risk monitoring or management – Plan to Offer Identity management – Plan to Offer

### Goldman, Sachs & Co.

85 Broad Street

New York, New York 10004-2456 1.212.902.1000 www.portal.gs.com

#### Market:

Multiple dealer-to-(buy-side) customer

#### **Platform Supports:**

Primary market new issues and secondary market trading

#### Trading Method:

Order driven Market-making or cross-matching Request for quote Auction

#### Market Participants Eligible/Not Eligible to Use Platform Directly:

Dealers as providers of liquidity – Eligible Dealers as consumers of liquidity – Eligible Institutional investors ("buy side") – Eligible Retail investors – Eligible

#### Platform has dedicated liquidity providers or market makers.

Platform does not have a minimum trade size.

## Information available to all trading system participants in real-time and with a delay for trades executed on this platform:

Coupon	Rating
CUSIP/ISIN number	Spread to benchmark
Historical trade data	TRACE trade data
Issue size	Trade size
Issuer name	Whether trade was executed at the
Maturity	bid or ask
MSRB trade data	Yield of trade
Price of trade	

#### Products traded on the platform and the types of trade:

(U = US Products)	E = European Pr	oducts	A = Asi	ian Products)
Product	Cash	n Repo	Basis	Spread
Agency securities	UE			
Canada	U			
Commercial paper	UE			
Credit derivatives	UE			
ETFs	E			
Emerging markets	UE			
Futures	UΕ			
FX	UE	A		
High-grade corporate	UE			
High yield corporate				U
Interest rate swaps	Е			
Municipal securities	U			
Non-agency MBS	U			
Other money market	U			
Pfandbriefe/covered bo	onds E			
Sovereign securities	ΕA			
Supranational securitie	s UE			
Treasury securities	U			
•				

Platform provides direct access to trade clearance and settlement functions.

Trading platform is compliant with FIX Protocol version 4.4 and supports FIX 4.4, FIX 4.2, XML and other integration interfaces.

Services other than price discovery/trade execution offered or plan to offer to users of the platform:

Confirmation/allocation – Currently Offered Pre-trade analytics – Currently Offered Electronic research delivery – Currently Offered Regulatory/compliance – Currently Offered Identity management – Currently Offered

### **Grant Street Group**

1800 Allegheny Building429 Forbes AvenuePittsburgh, Pennsylvania 152191.412.391.5555www.grantstreet.com

#### Market:

Issuer to dealer/investor

#### **Platform Supports:**

Primary market new-issues

#### **Trading Method:**

Request for quote. No limit in the number of quotes a customer may request for a single trade.

#### Market Participants Eligible/Not Eligible to Use Platform Directly:

Dealers as providers of liquidity – Eligible Dealers as consumers of liquidity – Eligible Institutional investors ("buy side") – Not Eligible Retail investors – Not Eligible

#### Platform does not have dedicated liquidity providers or market makers.

#### Platform does not have a minimum trade size.

## Information available to all trading system participants in real-time and with a delay for trades executed on this platform:

Coupon	Rating
Issue size	Trade size
Issuer name	Whether trade was executed at the bid or ask
Maturity	Yield of trade

#### Products traded on the platform and the types of trade:

(U = US Products)	E = European Products		A = Asian Produc	
Product	Cash	Repo	Basis	Spread
Agency Securities	U			
CDs	U			
Commercial paper	U			
Interest rate swaps	U			
Municipal securities	U			
Other money market	U			
Treasury securities	U			
Other	U			

#### Platform does not provide direct access to trade clearance and settlement functions.

Trading platform is not compliant with FIX Protocol version 4.4.

### G.X. Clarke & Co.

10 Exchange Place, Suite 1005 Jersey City, New Jersey 07302 1.201.200.3600 www.gxecute.com

#### Market:

Single dealer-to-(buy-side) customer

#### **Platform Supports:**

Secondary market trading

#### **Trading Method:**

Order driven Market-making or Cross-matching Request for quote

#### Market Participants Eligible/Not Eligible to Use Platform Directly:

Dealers as providers of liquidity – Eligible Dealers as consumers of liquidity – Eligible Institutional investors ("buy side") – Eligible Retail investors – Not Eligible

#### Platform does not have a minimum trade size.

## Information available to all trading system participants in real-time for trades executed on this platform:

Coupon CUSIP/ISIN number Issue size Issuer name Maturity Price of trade Spread to benchmark Trade size Whether trade was executed at the bid or ask Yield of trade

#### Products traded on the platform and the types of trade:

(U = US Products)	E = European Products		A = Asi	ian Products)
Product	Cash	Repo	Basis	Spread
Agency MBS	U	-		-
Agency securities	U			
Treasury securities	U			

#### Platform provides direct access to trade clearance and settlement functions.

#### Trading platform is compliant with FIX Protocol version 4.4.

## Services other than price discovery/trade execution offered or plan to offer to users of the platform:

Confirmation/allocation – Currently Offered Order management – Currently Offered

### HDAT

Bank of Greece 21 East Venizelos Avenue 102 50 Athens, Greece 30.210.320.111 www.bankofgreece.gr

#### Market:

Inter-Dealer

#### **Platform Supports:**

Primary market new-issues and secondary market trading

#### **Trading Method:**

Quote driven Auction

#### Market Participants Eligible/Not Eligible to Use Platform Directly:

Dealers as providers of liquidity – Eligible Dealers as consumers of liquidity – Eligible Institutional investors ("buy side") – Eligible Retail investors –Eligible

#### Platform has dedicated liquidity providers or market makers.

#### Platform has a minimum trade size of €5 million.

## Information available to all trading system participants in real-time for trades executed on this platform:

Coupon	Issue size	Price of trade
CUSIP/ISIN number	Issuer name	Trade size
Historical trade data	Maturity	

#### Products traded on the platform and the types of trade:

(U = US Products)	E = European Products		A = Asi	an Products)
Product	Cash	Repo	Basis	Spread
Sovereign securities	Е	Ε		-

#### Platform supports trading in the following European sovereigns:

At present, supports trading only in Greek sovereign securities, both cash and repo, however, corporate bonds are also eligible for trading.

### Platform provides direct access to trade clearance and settlement functions through:

Bank of Greece Securities Settlement System (BOGS)

#### Trading platform is not compliant with FIX Protocol version 4.4.

### Services other than price discovery/trade execution offered or plan to offer to users of the platform:

Confirmation/allocation – Currently Offered Order management – Currently Offered

### HTDonline

Hartfield, Titus & Donnelly LLC 111 Pavonia Avenue, Suite 1430 Jersey City, New Jersey 07310 1.201.217.8080 www.htdonline.com

#### Market:

Inter-Dealer

#### **Platform Supports:**

Secondary market trading

#### **Trading Method:**

Market-making or Cross-matching Request for quote. No limit in the number of quotes a customer may request for a single trade. Auction

#### Market Participants Eligible/Not Eligible to Use Platform Directly:

Dealers as providers of liquidity – Eligible Dealers as consumers of liquidity – Eligible Institutional investors ("buy side") – Eligible Retail investors – Not Eligible

#### Platform does not have dedicated liquidity providers or market makers.

#### Platform does not have a minimum trade size.

### Information available to all trading system participants in real-time for trades executed on this platform:

Coupon CUSIP/ISIN number Historical trade data Issuer name Maturity MSRB trade data Price of trade Rating Spread to benchmark Trade size Yield of trade

#### Products traded on the platform and the types of trade:

(U = US Products)	E = European Products		A = Asi	ian Products)
Product	Cash	Repo	Basis	Spread
Municipal securities	U	*		*

#### Platform provides direct access to trade clearance and settlement functions through: FICC

Trading platform is not compliant with FIX Protocol version 4.4.

## Services other than price discovery/trade execution offered or plan to offer to users of the platform:

Pre-trade analytics – Currently Offered Direct feed of dealer to buy-side portfolio – Currently Offered Electronic research delivery – Currently Offered Regulatory/compliance – Currently Offered

### **ICAP Electronic Broking**

Harborside Financial Center Plaza 5 Jersey City, New Jersey 07302 1.201.209.7800 www.icap.com

#### Market:

Inter-Dealer

#### Platform Supports:

Secondary market trading

#### **Trading Method:**

Order driven

#### Market Participants Eligible/Not Eligible to Use Platform Directly:

Dealers as providers of liquidity – Eligible Dealers as consumers of liquidity – Eligible Institutional investors ("buy side") – Not Eligible Retail investors – Not Eligible

#### Platform does not have dedicated liquidity providers or market makers.

#### Platform has a minimum trade size of \$1 million.

## Information available to all trading system participants in real-time for trades executed on this platform:

CouponPrice of tradeCUSIP/ISIN numberSpread to benchmarkHistorical trade dataTrade sizeIssuer nameWhether trade was executed at the bid or askMaturityYield of trade

#### Products traded on the platform and the types of trade:

cts traded on the platform and the types of trade.					
(U = US Products)	E = European Prod	ucts	A = Asi	ian Products	X = Other)
Product	Cash	Repo	Basis	Spread	
Agency MBS	U	U			
Agency securities	UE	UΕ		U	
Canada	U				
Credit derivatives	$\mathrm{U}^{1}\mathrm{E}$				
Forward X	U E A				
High-grade corporate		Е			
High-yield corporate		Е			

#### Products traded on the platform and the types of trade: (Continued)

Product	Cash	Repo	Basis	Spread
Interest rate swaps	E			
Pfandbriefe/covered bonds	E	Е		
Sovereign securities	ΕA	Е	Е	
Supranational securities	UΕ	Е		
Treasury securities	U	U	U	U

<sup>1</sup>Indices only

## Platform provides provide direct access to trade clearance and settlement functions through:

FICC (GSCC)	LCH/Clearnet	Euroclear	Clearstream
MBSCC	Crest	CCS	

#### Trading platform is not compliant with FIX Protocol version 4.4.

## Services other than price discovery/trade execution offered or plan to offer to users of the platform:

Confirmation/allocation – Currently Offered Order management – Currently Offered Regulatory/compliance – Currently Offered Risk monitoring or management – Currently Offered Identity management – Currently Offered

### i-Deal LLC

139 Broadway, 2<sup>nd</sup> Floor New York, New York 10018 1.212.849.5000 *www.i-deal.com* 

#### Market:

Single dealer-to-(buy-side) customer Multiple dealer-to-(buy-side) customer Issuer to dealer/investor

#### Platform Supports:

Secondary market trading

#### **Trading Method:**

Order driven Auction

#### Market Participants Eligible/Not Eligible to Use Platform Directly:

Dealers as providers of liquidity – Not Eligible Dealers as consumers of liquidity – Eligible Institutional investors ("buy side") – Eligible Retail investors – Eligible

#### Platform does not have dedicated liquidity providers or market makers.

#### Platform does not have a minimum trade size.

## Information available to all trading system participants in real-time for trades executed on this platform:

Coupon	Issuer name	Rating
CUSIP/ISIN number	Maturity	Spread to benchmark
Historical trade data	MSRB trade data	Trade size
Issue size	Price of trade	Yield of trade

#### Products traded on the platform and the types of trade:

(U = US Products)	E = European Products		A = Asi	ian Products)
Product	Cash	Repo	Basis	Spread
Commercial Paper	U			-
Credit derivatives	U			
High-grade corporate	U			
High-yield corporate	U			
Municipal securities	U			
Other money market	U			

#### Platform does not provide direct access to trade clearance and settlement functions.

#### Trading platform is compliant with FIX Protocol version 4.4.

### Services other than price discovery/trade execution offered or plan to offer to users of the platform:

Confirmation/allocation – Currently Offered Order management – Currently Offered Pre-trade analytics – Currently Offered Direct feed to dealer inventory to buy-side portfolio – Currently Offered Electronic research delivery – Plan to Offer Regulatory/compliance – Currently Offered Risk monitoring or management – Currently Offered Identity management – Currently Offered

### J.P. Morgan eXpress

J.P. Morgan Chase 270 Park Avenue, 6<sup>th</sup> Floor New York, New York 10017 1.866.762.7559 www.jpmorganexpress.com

#### Market:

Inter-dealer

#### **Platform Supports:**

Secondary market trading

#### **Trading Method:**

Order driven Request for quote

#### Market Participants Eligible/Not Eligible to Use Platform Directly:

Dealers as providers of liquidity – Not Eligible Dealers as consumers of liquidity – Eligible Institutional investors ("buy side") – Eligible Retail investors –Not Eligible

#### Platform has a minimum trade size that varies per product.

## Information available to all trading system participants in real-time and with a delay for trades executed on this platform:

Coupon	Maturity	TRACE trade data
CUSIP/ISIN number	MSRB trade data	Trade size
Historical data	Price of trade	Whether trade was executed at
Issue size	Rating	the bid or ask
Issuer name	Spread to benchmark	Yield of trade

#### Products traded on the platform and the types of trade:

(U = US Products)	E = European Prod	lucts	A = Asian Products)	
Product	Cash	Repo	Basis	Spread
Agency MBS	U	U		-
Agency securities	UE	U		
Canada	U			
CDs	U			
Commercial paper	UA			
Credit derivatives	UE			
Emerging markets	U E A			
Futures	UE			
FX	U E A			
High-grade corporate	U E A			UΕ
High-yield corporate	UE			
Interest rate swaps <sup>1</sup>	UE			UΕ
Municipal securities	U			
Non-agency MBS	U			
Other money market	U			
Pfandbriefe/covered bo	onds E			
Sovereign securities	ΕA			
Sub-sovereign securitie	es E			
Supranational securitie	es U E			
Treasury securities	U	U		

#### Platform supports trading in the following European sovereigns:

Greece	Portugal
Hungary	South Africa
Ireland	Spain
Italy	Sweden
The Netherlands	United Kingdom Guilts
Poland	
	Hungary Ireland Italy The Netherlands

#### Platform supports trading in the following Asian sovereigns:

Japan

Platform provides direct access to trade clearance and settlement functions through: DTCC Swapswire Trading platform is compliant with FIX Protocol version 4.4, and supports FIX 4.4, FIX 4.2 and XML integration interfaces.

### Services other than price discovery/trade execution offered or plan to offer to users of the platform:

Confirmation/allocation – Currently Offered Pre-trade analytics – Currently Offered Direct feed of dealer inventory to buy-side portfolio –Currently Offered Electronic research delivery – Currently Offered Regulatory/compliance – Currently Offered Identity management – Currently Offered

### LehmanLive

Lehman Brothers, Inc. 745 Seventh Avenue New York, New York 10019 1.800.265.3251 www.lehmanlive.com

#### Market:

Single dealer-to-(buy-side) customer

### Platform Supports:

Secondary market trading

#### Trading Method:

Request for quote Order driven

#### Market Participants Eligible/Not Eligible to Use Platform Directly:

Dealers as providers of liquidity – Eligible Dealers as consumers of liquidity – Eligible Institutional investors ("buy side") – Eligible Retail investors – Not Eligible

#### Platform does not have dedicated liquidity providers or market makers.

#### Platform has a minimum trade size of \$0.025 million.

### Information available to all trading system participants in real-time for trades executed on this platform:

Coupon CUSIP/ISIN number Issue size Issuer name Maturity MSRB Trade data Price of trade Rating Spread to benchmark TRACE trade data Trade size Yield of trade Whether trade was executed at the bid or ask

#### Products traded on the platform and the types of trade:

oo Basis Spread
_

Platform provides direct access to trade clearance and settlement functions through:<br/>TradeWebTradeWebGSCCOasisDTCC

## Trading platform is compliant with FIX Protocol version 4.4, supporting FIX 4.4, FIX 4.2 and other integration interfaces.

## Services other than price discovery/trade execution offered or plan to offer to users of the platform:

Confirmation/allocation – Currently Offered Pre-trade analytics – Currently Offered Direct feed to dealer inventory to buy-side portfolio – Currently Offered Electronic research delivery – Currently Offered Risk monitoring or management – Currently Offered

### MarketAxess

140 Broadway, 42nd Floor New York, New York 10005 1.212.813.6000 or MarketAxess Europe, Ltd. 71 Fenchurch Street London EC3M 4BS United Kingdom 44 (0) 20 7709 3105 www.marketaxess.com

#### Market:

Multiple dealer-to-(buy-side) customer

#### **Platform Supports:**

Secondary market trading

#### Trading Method:

Request for quote. The maximum number of quotes a customer may request for a single trade is 19.Market-making or cross-matching

#### Market Participants Eligible/Not Eligible to Use Platform Directly:

Dealers as providers of liquidity – Eligible Dealers as consumers of liquidity – Not Eligible Institutional investors ("buy side") – Eligible Retail investors – Not Eligible

#### Platform has dedicated liquidity providers or market makers.

#### Platform does not have a minimum trade size.

## Information available to all trading system participants in real-time for trades executed on this platform:

Coupon	Issuer name	Spread to benchmark
CUSIP/ISIN number	Maturity	TRACE trade data
Historical trade data	Price of trade	Trade size
Issue size	Rating	Yield of trade

#### Products traded on the platform and the types of trade:

(U = US Products	E = European Products		A = Asi	ian Products)
Product	Cash	Repo	Basis	Spread
Agency securities	U			
Credit derivatives	UE			
Emerging Markets	UE			
High-grade corporate	UE			
High-yield corporate	UE			
Other: FRNs, New Issu	ies U E			
Supranational securitie	s U E			

#### Platform supports trading in the following European sovereigns:

All countries in Europe—Eurobonds or Euros only

## Platform provides direct access to trade clearance and settlement functions through: DTCC

Trading platform is compliant with FIX Protocol version 4.4, and supports FIX 4.4, FIX 4.2 and XML integration interfaces.

### Services other than price discovery/trade execution offered or plan to offer to users of the platform:

Confirmation/allocation – Currently Offered Order management – Currently Offered Pre-trade analytics – Currently Offered Direct feed to dealer inventory to buy-side portfolio – Currently Offered Electronic research delivery – Currently Offered Regulatory/compliance – Currently Offered

### **Merrill Lynch**

2 World Financial Center New York, New York 10281 1.212.236.2200 www.ml.com

#### Market:

Single dealer-to-(buy-side) customer

#### **Platform Supports:**

Primary market new-issues and secondary market trading

#### Trading Method:

Order driven Request for quote Auction

#### Market Participants Eligible/Not Eligible to Use Platform Directly:

Dealers as providers of liquidity – Eligible Dealers as consumers of liquidity – Eligible Institutional investors ("buy side") – Eligible Retail investors – Eligible

#### Platform has dedicated liquidity providers or market makers.

#### Platform does not have a minimum trade size.

## Information available to all trading system participants in real-time for trades executed on this platform:

CouponMaturityWhether trade was executedCUSIP/ISIN numberPrice of tradeat the bid or askHistorical trade dataRatingYield of tradeIssue sizeSpread to benchmarkIssuer nameTrade size

#### Products traded on the platform and the types of trade:

(U = US Products)	E = European Products		A = Asian Products	
Product	Cash	Repo	Basis	Spread
Agency securities	U			
CDs	U			
Commercial paper	U			
High-grade corporate	U			
High-yield corporate	U			
Municipal securities	U			
Other money market	U			
Supranational securitie	s U			
Treasury securities	U			

Platform does not provide direct access to trade clearance and settlement functions.

Trading platform is not compliant with FIX Protocol version 4.4.

## Services other than price discovery/trade execution offered or plan to offer to users of the platform:

Confirmation/allocation – Currently Offered Identity management – Currently Offered

### Merrill Lynch Asia Pacific

2 World Financial Center New York, New York 10281 1.212.236.2200 www.ml.com

#### Market:

Single dealer-to-(buy-side) customer

#### Platform Supports:

Secondary market trading

#### Trading Method:

Order driven Request for quote

#### Market Participants Eligible/Not Eligible to Use Platform Directly:

Dealers as providers of liquidity –Not Eligible Dealers as consumers of liquidity – Not Eligible Institutional investors ("buy side") – Eligible Retail investors – Not Eligible

#### Platform does not have dedicated liquidity providers or market makers.

#### Platform does not have a minimum trade size.

# Information available to all trading system participants in real-time for trades executed on this platform:

Coupon	Maturity	Whether trade was executed
CUSIP/ISIN number	Price of trade	at the bid or ask
Issuer name	Trade size	Yield of trade

#### Products traded on the platform and the types of trade:

E = European Products		A = Asi	ian Products)
Cash	Repo	Basis	Spread
UA			
UE			
UA			
ΕA			
U			
	Cash U A U E U A	Cash Repo U A U E U A	Cash Repo Basis U A U E U A

#### Platform supports trading in the following European sovereigns:

Core Euro Sovereigns and Scandinavia

#### Platform supports trading in the following Asian sovereigns:

China/Hong Kong, Korea, Philippines, Indonesia, Singapore, Malaysia

#### Platform provides direct access to trade clearance and settlement functions through:

MLA Trading Platform provides STP to internal back office systems which facilitate settlement via Euroclear (Euro) and DTC (US)

Trading platform is not compliant with FIX Protocol version 4.4.

Services other than price discovery/trade execution offered or plan to offer to users of the platform:

Confirmation/allocation - Currently Offered

### **Mizuho Securities**

111 River Street, 11<sup>th</sup> Floor Hoboken, New Jersey 07030 1.201.626.1000 www.mizuhosecurities.com

#### Market:

Multiple dealer-to-(Buy-side) customer

#### Platform Supports:

Primary market new-issues and secondary market trading

#### **Trading Method:**

Market-making or Cross-matching Request for quote

#### Market Participants Eligible/Not Eligible to Use Platform Directly:

Dealers as providers of liquidity – Eligible Dealers as consumers of liquidity – Eligible Institutional investors ("buy side") – Eligible Retail investors –Eligible

#### Platform has dedicated liquidity providers or market makers.

#### Platform does not have a minimum trade size.

### Information available to all trading system participants in real-time for trades executed on this platform:

Coupon	Issuer name	Trade size
CUSIP/ISIN number	Maturity	Yield of trade
Issue size	Price of trade	

#### Products traded on the platform and the types of trade:

(U = US Products)	E = European Products		A = Asian Products)	
Product	Cash	Repo	Basis	Spread
Agency securities	U	-		-
Treasury securities	U			
Other money market	U			

#### Platform provides direct access to trade clearance and settlement functions through: Bloomberg trade support

#### Trading platform is not compliant with FIX Protocol version 4.4.

Services other than price discovery/trade execution offered or plan to offer to users of the platform:

Direct feed of dealer inventory to buy-side portfolio - Currently Offered

### MOT

Borsa Italiana S.p.A.--Italian Exchange Piazza degli Affari n 6 20123 Milano Italy 011.39.02.72.42.6276 www.borsaitalia.it

### Market:

Inter-Dealer

### **Platform Supports:**

Secondary market trading

### **Trading Method:**

Order driven<sup>1</sup> Auction

<sup>1</sup>MOT is organized as an order driven market where only authorized operators (intermediaries) may directly enter orders. Intermediaries may operate on proper and/or customer account.

### Market Participants Eligible/Not Eligible to Use Platform Directly:

Broker/Dealers as providers of liquidity – Eligible Broker/Dealers as consumers of liquidity – Eligible Institutional investors ("buy side") – Not Eligible Retail investors – Not Eligible

### Platform has dedicated liquidity providers or market makers.

## Platform has a minimum trade size which is defined according to main features of each financial instrument.

## Information available to all trading system participants in real-time for trades executed on this platform:

Coupon	Maturity
CUSIP/ISIN number	Price of trade
Historical trade data	Trade size
Issue size	Whether trade was executed at the bid or ask
Issuer name	

### Products traded on the platform and the types of trade:

(U = US Products)	E = European Products		A = Asian Products	
Product	Cash	Repo	Basis	Spread
ABS	E			
Emerging markets	Е			
ETFs	E			

Product	Cash	Repo	Basis	Spread
Exchange-traded options	Е			
Futures	Е			
High-grade corporate	Е			
High-yield corporate	E			
MBS	Е			
Sovereign securities	Е			
Sub-sovereign securities	E			
Supranational securities	Е			

### Platform supports trading in the following European sovereigns:

Austria	Germany	Spain
France	Greece	

Platform provides direct access to trade clearance and settlement functions through: Monte Titoli, the Italian CSD, and Euroclear and Clearstream via Monte Titoli

### Trading platform is not compliant with FIX Protocol version 4.4.

Services other than price discovery/trade execution offered or plan to offer to users of the platform:

Confirmation/allocation – Currently Offered Identity management – Currently Offered

## **MTS Group**

30 Old Broad Street London EC2N 1HT United Kingdom 44.20.7786.6001 www.mtsgroup.org

MTS Group includes the following fixed-income trading platforms:

### **EuroMTS Limited**

30 Old Broad Street London EC2N 1HT United Kingdom United Kingdom 44.20.7786.6001 www.euromts-ltd.com

### **MTS Amsterdam**

Busitel 2 Orlyplein 32 1043 DP Amsterdam The Netherlands 31.20.5310460 www.mtsamsterdam.com

### **MTS Associated Markets**

Avenue des Artes 30 1040 Brussels Belgium 32.2.235.0020 www.mtsbelgium.com www.mtsfinland.com

### **MTS** Austria

30 Old Broad Street London EC2N 1HT United Kingdom 44.20.7786.6001 Fax: 44.20.7786.6000 <u>www.mtsaustria.com</u>

### **MTS Deutschland**

Lurgiallee 5 60295 Frankfurt Germany 49.69.5808.4511 www.mtsgermany.com

### **MTS France**

39, Rue Cambon 75039 Paris de la defense cedex France 33.1.4927.1462 www.mtsfrance.com www.mtsfinland.com

### **MTS Greek Market**

30 Old Broad Street London EC2N 1HT United Kingdom 44.20.7786.6001 Fax: 44.20.7786.6000 www.mtsgreece.com

### **MTS Ireland**

30 Old Broad Street London EC2N 1HT United Kingdom 44.20.7786.6001 www.mtsireland.com

### **MTS Portugal SGMR, SA**

Av. Defensores de Chaves, 15, 4B 10 0 0-109 Lisbon Portugal 351.21.351.1930 www.mtsportugal.com

### MTS S.p.A.

Piazza Paolo Farrari, 8 20121 Milan Italy 39.02.80235201 www.mtsspa.it www/mtsgroup.org

### **MTS Spain**

Torres Coloń Torre II, Plaza Coloń, 2 28046 Madrid Spain 34.91.702.7909 www.mtsspain.com

#### Market:

Inter-Dealer

### **Platform Supports:**

Primary market new-issues and secondary market trading

### **Trading Method:**

Order driven Market-making or cross-matching<sup>1</sup> Auction Request for quote (works almost like a bilateral negotiation too like OTC trade)

### Market Participants Eligible/Not Eligible to Use Platform Directly:

Dealers as providers of liquidity – Eligible Dealers as consumers of liquidity – Eligible Institutional investors ("buy side") – Not Eligible Retail investors – Not Eligible

### Platform has dedicated liquidity providers or market makers.

### Platform has a minimum trade size depending on instrument and market.

## Information available to all trading system participants in real-time for trades executed on this platform:

Coupon CUSIP/ISIN number Historical trade data Issuer name Maturity Price of trade Rating Trade size Whether trade was executed at the bid or ask Yield of trade

(U = US Products)	E = Europ	ean Proc	lucts	A = Asi	ian Products)
Product		Cash	Repo	Basis	Spread
ABS		Е	E		-
Agency securities		UΕ	Е	Е	
Emerging markets		Е			
MBS		Е	Е		
Other money market		Е	Е		
Pfandbriefe/covered b	onds	Е	Е		
Sovereign securities		ΕA	Е	Е	
Sub-sovereign securiti	es	Е	Е		
Supranational securitie	es	UΕ	Е	Е	

### Platform supports trading in the following European sovereigns:

Austria	France	Portugal
Belgium	Germany	Romania
Bulgaria	Greece	Slovakia
Croatia	Hungary	Slovenia
Cyprus	Ireland	Spain
Czech Republic	Italy	Turkey
Denmark	Lithuania	
Finland	Poland	

#### Platform supports trading in the following Asian sovereigns: China

### Platform provides direct access to trade clearance and settlement functions.

Bank of Greece	Euroclear/Clearstream
CADE (Iberclear)	Express II
CC&G	LCH
Clearnet	National Bank Belgium

### Services other than price discovery/trade execution offered or plan to offer to users of the platform:

Confirmation/allocation – Currently Offered Order management - Currently Offered

### **PDEx**

Philippine Dealing & Exchange Corp. 37/F, Tower 1, The Enterprise Center Makati City, Phillipines 632.884.5000 www.pedx.com.ph

### Market:

Inter-dealer

### **Platform Supports:**

Secondary market trading

### **Trading Method:**

Order driven Market-making or cross-matching

### Market Participants Eligible/Not Eligible to Use Platform Directly:

Dealers as providers of liquidity – Eligible Dealers as consumers of liquidity –Eligible Institutional investors ("buy side") – Not Eligible Retail investors – Not Eligible

### Platform has dedicated liquidity providers or market makers.

### Platform does not have a minimum trade size.

## Information available to all trading system participants in real-time for trades executed on this platform:

Coupon	Price of trade
CUSIP/ISIN number	Trade size
Historical trade data	Yield of trade
Issuer name	
Maturity	

### Products traded on the platform and the types of trade:

(U = US Products)	E = European Products		A = Asian Products	
Product	Cash	Repo	Basis	Spread
FX	А	-		-
Sovereign securities	А			

NOTE: While none currently, plans on rolling out Asian cash products in agency securities, commercial paper, high-grade corporate, high-yield corporate, MBS, ABS and whole loans.

### Platform provides direct access to trade clearance and settlement functions though:

RoSS- Philpass DVP System (RoSS is Registry of Scripless Securities and DVP is Delivery vs. Payment)

### Trading platform is not compliant with FIX Protocol version 4.4.

## Services other than price discovery/trade execution offered or plan to offer to users of the platform:

Identity management - Currently Offered

### **RetLots Exchange**

Via Boito, 7 20121 Milan Italy 39.02.80.215.500 www.caboto.it

### Market:

Single dealer-to-(buy-side) customer

### **Platform Supports:**

Secondary market trading

### **Trading Method:**

Market-making or cross-matching

### Market Participants Eligible/Not Eligible to Use Platform Directly:

Dealers as providers of liquidity – Eligible Dealers as consumers of liquidity – Eligible Institutional investors ("buy side") – Not Eligible Retail investors – Not Eligible

### Platform has dedicated liquidity providers or market makers.

### Platform does not have a minimum trade size.

## Information available to all trading system participants in real-time for trades executed on this platform:

Coupon CUSIP/ISIN number Historical trade data Issue size Issuer name Maturity Price of trade Rating Trade size Yield of trade

#### Products traded on the platform and the types of trade:

(U = US Products)	E = European Products		A = As	ian Products)
Product	Cash	Repo	Basis	Spread
Agency securities	UE			
Emerging markets	UE			
High-grade corporate	UE			
High-yield corporate	UE			
Sovereign securities	E			
Sub-sovereign securitie	es E			
Supranational securitie	s U E			

### Platform does not provide direct access to trade clearance and settlement functions.

### Trading platform is not compliant with FIX Protocol version 4.4.

## Services other than price discovery/trade execution offered or plan to offer to users of the platform:

Confirmation/allocation – Currently Offered Order Management – Currently Offered Electronic research delivery – Currently Offered Regulatory/compliance – Currently Offered Risk monitoring or management – Currently Offered

### **Reuters Trading for Fixed Income**

3 Times Square New York, NY 10036 1.646.223.4000 www.reuters.com

### Market:

Single dealer-to-(buy-side) customer Multiple dealer-to-(buy-side) customer

### Platform Supports:

Secondary market trading

#### **Trading Method:**

Request for quote. Maximum number of quotes a customer may request for a single trade is five.

### Market Participants Eligible/Not Eligible to Use Platform Directly:

Dealers as providers of liquidity – Eligible Dealers as consumers of liquidity – Eligible Institutional investors ("buy side") – Eligible Retail investors – Eligible

### Platform has dedicated liquidity providers or market makers.

### Platform has a minimum trade size depending on product.

## Information available to all trading system participants in real-time for trades executed on this platform:

Coupon	Rating
CUSIP/ISIN number	Spread to benchmark
Historical trade data	TRACE trade data
Issue size	Trade size
Issuer name	Whether trade was executed at the bid or ask
Maturity	Yield of trade
Price of trade	

### Products traded on the platform and the types of trade:

(U = US Products)	E = European Products		A = Asi	ian Products)
Product	Cash	Repo	Basis	Spread
ABS	U E A			
Agency MBS	U			
Agency securities	U E A			
Emerging markets	U E A			
High-grade corporate	U E A			
High-yield corporate	U E A			
MBS	ΕA			
Non-agency MBS	U			
Pfandbriefe/covered bo	onds E A			
Sovereign securities	ΕA			
Emerging markets High-grade corporate High-yield corporate MBS Non-agency MBS Pfandbriefe/covered bo	U E A U E A U E A E A U onds E A			

Cash	Repo	Basis	Spread
ΕA	-		-
U E A			
U			
	ΕA	ΕA	EA

### Platform supports trading in the following European sovereigns:

Bulgaria	Israel	South Africa
Croatia	Italy	Spain
Cyprus	Latvia	Sweden
Czech Republic	Lithuania	Turkey
Denmark	Poland	Ukraine
Estonia	Portugal	United Kingdom
Greece	Romania	
Hungary	Slovakia	

### Platform supports trading in the following Asian sovereigns:

Australia	Malaysia	South Korea
China	New Zealand	Taiwan
Hong Kong	Philippines	Thailand
Indonesia	Singapore	

### Platform does not provide direct access to trade clearance and settlement functions.

### Trading platform is compliant with FIX Protocol version 4.4.

## Services other than price discovery/trade execution offered or plan to offer to users of the platform:

Confirmation/allocation – Currently Offered Order management – Plan to Offer Pre-trade analytics – Currently Offered Direct feed to dealer inventory to buy-side portfolio – Plan to Offer Electronic research delivery – Currently Offered Regulatory/compliance – Currently Offered Risk monitoring or management – Currently Offered

### SENAF

Pza. Pablo Ruiz Picasso 1 Torre Picasso Floor 26 Madrid 28020 Spain 00.34.91.7709370 www.senaf.net

Market:

Inter-Dealer

### Platform Supports:

Secondary market trading

### **Trading Method:**

Order driven Market-making or Cross-matching

### Market Participants Eligible/Not Eligible to Use Platform Directly:

Dealers as providers of liquidity – Eligible Dealers as consumers of liquidity – Eligible Institutional investors ("buy side") – Not Eligible Retail investors – Not Eligible

### Platform has dedicated liquidity providers or market makers.

### Platform has a minimum trade size of \$1 million.

## Information available to all trading system participants in real-time for trades executed on this platform:

CouponPrice of tradeCUSIP/ISIN numberSpread to benchmarkHistorical trade dataTrade sizeIssue sizeWhether trade was executed at the bid or askIssuer nameYield of tradeMaturityHistorical trade was executed at the bid or ask

### Products traded on the platform and the types of trade:

(U = US Products)	E = European Products		A = Asi	ian Products)
Product	Cash	Repo	Basis	Spread
Sovereign securities	Е	Ε		*

### Platform supports trading in the following European sovereigns:

Spain

Platform provides direct access to trade clearance and settlement functions through: Iberclear Meffclear

Trading platform is not compliant with FIX Protocol version 4.4.

## Services other than price discovery/trade execution offered or plan to offer to users of the platform:

Confirmation/allocation – Currently Offered Order management – Currently Offered Pre-trade analytics – Currently Offered

### Surabaya Stock Exchange

Centralized Trading Platform Madam Permuda Building, 5<sup>th</sup> Floor J1, Permuda No. 21-31 Surabaya 60271, Indonesia 6221.5266210 www.bes.co.id

### Market:

Inter-Dealer Single dealer-to-(buy-side) customer Multiple dealer-to-(buy-side) customer

### **Platform Supports:**

Secondary market trading

### Trading Method:

Order driven Auction

### Market Participants Eligible/Not Eligible to Use Platform Directly:

Dealers as providers of liquidity – Eligible Dealers as consumers of liquidity – Not Eligible Institutional investors ("buy side") – Not Eligible Retail investors – Eligible

### Platform has dedicated liquidity providers or market makers.

### Platform does not have a minimum trade size.

## Information available to all trading system participants in real-time for trades executed on this platform:

Coupon	Rating
Issue size	Trade size
Issuer name	Whether trade was executed at the bid or ask
Maturity	Yield of trade
Price of trade	

### Products traded on the platform and the types of trade:

(U = US Products)	E = European Products		A = Asian Products)	
Product	Cash	Repo	Basis	Spread
Agency securities		U	U	Ū
High-grade corporate		U	U	U
High-yield corporate		U	U	U
Treasury securities		U	U	U

### Platform does not support trading in European nor Asian sovereigns.

Platform provides direct access to trade clearance and settlement functions through: KPEIC – EBOC (Electronic Bond Clearing System)

### Trading platform is not compliant with FIX Protocol version 4.4.

## Services other than price discovery/trade execution offered or plan to offer to users of the platform:

Confirmation/allocation – Currently Offered Order management – Currently Offered Regulatory/compliance – Currently Offered Risk monitoring or management – Currently Offered Identity management – Currently Offered

### **SWX Eurobonds**

Selnaustrasse 30/Postfach CH-8021 Zurich Switzerland 41.1.229.25.95 www.swx.com

### Market:

Multiple dealer-to-(buy-side) customer

### **Platform Supports:**

Secondary market trading

### **Trading Method:**

Order driven

### Market Participants Eligible/Not Eligible to Use Platform Directly:

Dealers as providers of liquidity – Eligible Dealers as consumers of liquidity – Eligible Institutional investors ("buy side") – Eligible Retail investors –Eligible

### Platform has dedicated liquidity providers or market makers.

### Platform does not have a minimum trade size.

# Information available to all trading system participants in real-time for trades executed on this platform:

Coupon	Issue size	Price of trade
CUSIP/ISIN number	Issuer name	Trade size
Historical trade data	Maturity	

### Products traded on the platform and the types of trade:

(U = US Products)	E = European Products		A = As	ian Products)
Product	Cash	Repo	Basis	Spread
ABS	E			
Agency securities	E			
Emerging markets	E			
ETFs	E			
High-grade corporate	E			
High-yield corporate	E			
Pfandbriefe/covered be	onds E			
Sovereign securities	E			
Sub-sovereign securiti	es E			
Supranational securitie	es E			

### Platform provides direct access to trade clearance and settlement functions.

SIS Segaintersettle Euroclear

Clearstream Luxembourg

## Trading platform is compliant with FIX Protocol version 4.4, supporting FIX 4.4, FIX 4.2 and XML integration interfaces.

Services other than price discovery/trade execution offered or plan to offer to users of the platform:

Confirmation/allocation – Currently Offered Order management – Currently Offered Regulatory/compliance – Currently Offered Identity management – Currently Offered

## **TAAPSLink**<sup>®</sup>

Bureau of the Public Debt Treasury Auction Processing Center 999 E Street, NW, Room 510 Washington, DC 20239 1.202.691.3550 www.publicdebt.treas.gov

### Market:

Issuer to dealer/investor

### **Platform Supports:**

Primary market new-issues

### Trading Method:

Auction

### Market Participants Eligible/Not Eligible to Use Platform Directly:

Dealers as providers of liquidity – Eligible Dealers as consumers of liquidity –Eligible Institutional investors ("buy side") – Eligible Retail investors – Not Eligible

### Platform has dedicated liquidity providers or market makers.

### Platform has a minimum trade size of \$0.001 million

# Information available to all trading system participants in real time for trades executed on this platform:

Coupon	Issuer name	Trade size
CUSIP/ISIN number	Maturity	Yield of trade
Issue size	Price of trade	

### Products traded on the platform and the types of trade:

(U = US Products)	E = European Products		A = Asi	ian Products)
Product	Cash	Repo	Basis	Spread
Treasury securities	U	-		-

### Platform does not provide direct access to trade clearance and settlement functions.

Trading platform is not compliant with FIX Protocol version 4.4.

Services other than price discovery/trade execution offered or plan to offer to users of the platform:

Confirmation/allocation – Currently Offered Order management – Currently Offered

## **TDAX Eurobonds**

Triton Court, 14-18 Finsbury Square London EC2A 1DB United Kingdom 44.20.7920.0272 www.tdsecurities.com

### Market:

Inter-Dealer Single dealer-to-(buy-side) customer

### **Platform Supports:**

Primary market new-issues and secondary market trading

#### Trading Method:

Order driven Request for quote.

### Market Participants Eligible/Not Eligible to Use Platform Directly:

Dealers as providers of liquidity – Not Eligible Dealers as consumers of liquidity – Eligible Institutional investors ("buy side") – Eligible Retail investors – Eligible

### Platform has a dedicated liquidity provider.

### Platform does not have a minimum trade size.

# Information available to all trading system participants in real-time for trades executed on this platform:

Coupon	Price of trade	Yield of trade
Issuer name	Rating	
Maturity	Trade size	

### Products traded on the platform and the types of trade:

(U = US Products)	E = European Products		A = Asian Products	
Product	Cash	Repo	Basis	Spread
Emerging markets	UE	-		-
High-grade corporate	UE			
Sovereign securities	Е			
Supranational securitie	s UE			

<sup>1</sup>Does not trade in Asian sovereigns but does trade during Asian hours.

### Platform supports trading in the following European sovereigns:

Czech Republic	Iceland
Hungary	Poland

nd Turkey

## Services other than price discovery/trade execution offered or plan to offer to users of the platform:

Confirmation/allocation – Currently Offered Electronic research delivery – Currently Offered

## TheMuniCenter

540 Madison Avenue 4th Floor New York, New York 10022 1.866.686.4287 www.TheMuniCenter.com

### Market:

Inter-Dealer

### **Platform Supports:**

Primary new market issues and secondary market trading

### **Trading Method:**

Market-making or cross-matching

### Market Participants Eligible/Not Eligible to Use Platform Directly:

Dealers as providers of liquidity – Eligible Dealers as consumers of liquidity – Eligible Institutional investors ("buy side") – Eligible Retail investors – Not Eligible

### Platform has dedicated liquidity providers or market makers.

### Platform does not have a minimum trade size.

# Information available to all trading system participants in real-time for trades executed on this platform:

CouponIssuer nameRatingCUSIP/ISIN numberMaturitySpread to benchmarkHistorical trade dataMSRB trade dataTrade sizeIssue sizePrice of tradeYield of trade

### Products traded on the platform and the types of trade:

(U = US Products)	E = European Products		A = Asi	ian Products)
Product	Cash	Repo	Basis	Spread
Agency securities	U	-		-
CDs	U			
High-grade corporate	U			
High-yield corporate	U			
Municipal securities	U			

Product	Cash	Repo	Basis	Spread
Other money market	U	-		-
Treasury securities	U			

Platform provides direct access to trade clearance and settlement functions. Broadcort Bloomberg ADP

Trading platform is compliant with FIX Protocol version 4.4, supporting FIX 4.4 and XML integration interfaces.

Services other than price discovery/trade execution offered or plan to offer to users of the platform:

Confirmation/allocation – Currently Offered Order management – Currently Offered Pre-trade analytics – Currently Offered Direct feed to dealer inventory to buy-side portfolio – Currently Offered Electronic research delivery – Currently Offered Regulatory/compliance – Currently Offered

### **Thomson TradeWeb**

Harborside Financial Center 2200 Plaza Five Jersey City, New Jersey 07311 1.800.541.2268 <u>www.tradeweb.com</u>

### Market:

Multiple dealer-to-(buy-side) customer

### **Platform Supports:**

Secondary market trading

### Trading Method:

Order driven

Request for quote (maximum number of quotes a customer may request for a single trade is market dependent

### Market Participants Eligible/Not Eligible to Use Platform Directly:

Dealers as providers of liquidity – Eligible Dealers as consumers of liquidity – Eligible Institutional investors ("buy side") – Eligible Retail investors –Eligible

Platform has dedicated liquidity providers or market makers.

Platform does not have a minimum trade size that is market dependent.

Information available to all trading system participants in real-time for trades executed on this platform: TRACE trade data

MSRB trade data

### Products traded on the platform and the types of trade:

European Pro	ducts	A = Asi	an Products)
Cash	Repo	Basis	Spread
U	U		Ū
U	U		U
U			
UE			
nly) UE			
UE			UΕ
UE			UΕ
U			
U			
	U		
Е			Е
Е			E
UE			UΕ
U	U		U
	Cash U U U U U E U E E U E U E U E	U U U U UE Ily) UE UE UE U U U E E U U U U U U U U U U	Cash         Repo         Basis           U         U           U         U           U         U           UE         U           Ily)         UE           UE         U           E         E           UE         UE

### Platform supports trading in the following European sovereigns:

Austria	Greece	Portugal
Belgium	Luxembourg	Slovakia
Czech Republic	Hungary	Spain
Denmark	Ireland	Sweden
Finland	Italy	United Kingdom
France	Lithuania	
Germany	Poland	

Platform provides direct access to trade clearance and settlement functions. DTCC Swapswire Omegeo Tradematch

Trading platform is compliant with FIX Protocol version 4.4, supporting FIX 4.4, FIX 4.2, and XML as well as FPML, Spreadsheet, Flat File integration interfaces.

### Services other than price discovery/trade execution offered or plan to offer to users of the platform:

Confirmation/allocation - Currently Offered Order management – Currently Offered Pre-trade analytics – Currently Offered Direct feed to dealer inventory to buy-side portfolio - Currently Offered Electronic research delivery - Currently Offered Regulatory/compliance - Currently Offered Risk monitoring or management - Currently Offered

## TLX S.p.A.

Via Cavriana 20 20134 Milano Italy 39.02.30301450 www.eurotlx.com

### Market:

Multiple dealer-to-(buy-side) customer

### **Platform Supports:**

Secondary market trading

### **Trading Method:**

Order driven Market-making or Cross-matching

### Market Participants Eligible/Not Eligible to Use Platform Directly:

Dealers as providers of liquidity – Eligible Dealers as consumers of liquidity – Eligible Institutional investors ("buy side") – Not Eligible Retail investors – Not Eligible

### Platform has dedicated liquidity providers or market makers.

### Platform does not have a minimum trade size.

# Information available to all trading system participants in real-time for trades executed on this platform:

Coupon	Price of trade
CUSIP/ISIN number	Rating
Issuer name	Trade size
Maturity	

### Products traded on the platform and the types of trade:

E = European Products		A = As	ian Products)
Cash	Repo	Basis	Spread
U	-		-
UE			
UE			
UE			
E			
s UE			
U			
	Cash U U E U E U E E	Cash Repo U U E U E U E U E E	Cash Repo Basis U U E U E U E U E E

### Platform supports trading in the following European sovereigns:

Germany Italy

### Platform provides direct access to trade clearance and settlement functions.

Trading platform is not compliant with FIX Protocol version 4.2.

Services other than price discovery/trade execution offered or plan to offer to users of the platform:

Confirmation/allocation – Currently Offered Order management – Currently Offered Regulatory/compliance – Currently Offered

### Tokyo stock Exchange, Inc.

2-1 Nihombashi Kabuto, Chuo-ku Tokyo 103-8220 Japan or 45 Broadway New York, New York 10006 1.212.363.2350 <u>www.tse.or.jp/English/index</u>

### Market:

Inter-dealer

Platform Supports: Secondary market trading

### Trading Method:

Order driven Auction

### Market Participants Eligible/Not Eligible to Use Platform Directly:

Dealers as providers of liquidity – Eligible Dealers as consumers of liquidity – Eligible Institutional investors ("buy side") – Not Eligible Retail investors – Not Eligible

Platform does not have dedicated liquidity providers or market makers.

### Platform does not have a minimum trade size.

## Information available to all trading system participants in real-time for trades executed on this platform:

Price of trade S

Spread to benchmark

Trade size

(U = US Products)	E = European Prod	lucts	A = As	ian Products	X = Other)
Product	Cash	Repo	Basis	Spread	
High-grade corporate	U	-		-	
High-yield corporate	U				
Sovereign securities	U				

Platform supports trading in the following Asian sovereign: Japan

Platform does not provides direct access to trade clearance and settlement functions.

Trading platform is not compliant with FIX Protocol version 4.4.

## **TreasuryDirect**<sup>1</sup>

U.S. Treasury Department Bureau of the Public Debt Washington, DC 20239 1.877.392.2678 www.treasurydirect.gov

<sup>1</sup>Treasury Direct also includes a separate platform known as Legacy Treasury Direct.

### Market:

Issuer to dealer/investor

### Platform Supports:

Primary market new-issues

### **Trading Method:**

Order driven

### Market Participants Eligible/Not Eligible to Use Platform Directly:

Dealers as providers of liquidity –Eligible Dealers as consumers of liquidity –Eligible Institutional investors ("buy side") –Eligible Retail investors – Eligible

### Platform does not have dedicated liquidity providers or market makers.

#### Platform has a minimum trade size of \$0.001 million.

## Information available to all trading system participants in real time for trades executed on this platform:

Coupon CUSIP/ISIN number Issue size Issuer name Maturity Price of trade Trade size Yield of trade

(U = US Products	E = European Products		A = Asi	ian Products)
Product	Cash	Repo	Basis	Spread
Treasury securities	U	-		-

#### Platform does not provide direct access to trade clearance and settlement functions.

#### Trading platform is not compliant with FIX Protocol version 4.4.

# Services other than price discovery/trade execution offered or plan to offer to users of the platform:

Confirmation/allocation – Currently Offered Order management – Currently Offered

### ValuBond, Inc.

ValuBond Securities 6 Piedmont Center, Suite 300 Atlanta, Georgia 30306 1.877.392.8258 www.valubond.com

### Market:

Inter-Dealer

### **Platform Supports:**

Primary market new-issues and secondary market trading

### Trading Method:

Order driven Market-making or Cross-matching Request for quote. No limit in the number of quotes a customer may request for a single trade.

### Market Participants Eligible/Not Eligible to Use Platform Directly:

Dealers as providers of liquidity – Eligible Dealers as consumers of liquidity – Eligible Institutional investors ("buy side") – Not Eligible Retail investors – Not Eligible

#### Platform has dedicated liquidity providers or market makers.

### Platform does not have a minimum trade size.

## Information available to all trading system participants in real-time for trades executed on this platform:

Coupon CUSIP/ISIN number Historical trade data Issue size Issuer name Maturity MSRB trade data Price of trade Rating Spread to benchmark TRACE trade data Trade size Whether trade was executed at the bid or ask Yield of trade

(U = US Products)	E = European Prod	ucts	A = Asi	ian Products)
Product	Cash	Repo	Basis	Spread
Agency MBS	U			
Agency securities	U			
CD's	U			
Emerging markets	U			
High-grade corporate	U			
High-yield corporate	U			
Municipal securities	U			
Supranational	U			
Treasury securities	U			

Platform does not provide direct access to trade clearance and settlement functions.

Trading platform is compliant with FIX Protocol version 4.4.

## Services other than price discovery/trade execution offered or plan to offer to users of the platform:

Confirmation/allocation – Currently Offered Order management – Currently Offered Pre-trade analytics – Currently Offered Electronic research delivery – Plan to Offer Regulatory/compliance – Currently Offered Identity management – Currently Offered

## **Wells Fargo**

420 Montgomery Street San Francisco, California 94104 1.800.869.3557 www.wellsfargo.com

### Market:

Single dealer-to-(buy-side) customer Multiple dealer-to-(buy-sdie) customer

### **Platform Supports:**

Secondary market trading

### **Trading Method:**

Market-making or Cross-matching Request for quote

### Market Participants Eligible/Not Eligible to Use Platform Directly:

Dealers as providers of liquidity – Eligible Dealers as consumers of liquidity – Eligible Institutional investors ("buy side") – Not Eligible Retail investors – Not Eligible Platform has dedicated liquidity providers and market makers.

Platform does not have a minimum trade size.

Information available to all trading system participants in real-time for trades executed on this platform:

Coupon	Maturity	Trade size
CUSIP/ISIN number	Price of trade	Yield of trade

### Products traded on the platform and the types of trade:

(U = US Products)	E = European Products		A = Asian Products)	
Product	Cash	Repo	Basis	Spread
Agency securities	U	-		-
Treasury securities	U			

Platform provides direct access to trade clearance and settlement functions through: Phase3

### Yieldbroker

P.O. Box N140 Grosvenor Place Sydney NSW 1220 Australia or Level 6, 46 Market Street Sydney NSW 1220 Australia +61 .2.9994.2890 www.yieldbroker.com

#### Market:

Multiple dealer-to-(buy-side) customer

### **Platform Supports:**

Secondary market trading

### **Trading Method:**

Request for quote with a maximum of five quotes a customer may request for a single trade

### Market Participants Eligible/Not Eligible to Use Platform Directly:

Dealers as providers of liquidity – Not Eligible Dealers as consumers of liquidity – Eligible Institutional investors ("buy side") – Eligible Retail investors – Not Eligible

### Platform has dedicated liquidity providers and market makers.

Platform has a minimum trade size of \$0.01 million.

(U = US Products)	E = European Products		A = Asian Products)	
Product	Cash	Repo	Basis	Spread
Agency securities	U E A		U E A	ŪΕΑ
Canada	U		U	U
Futures			А	
High-grade corporate	U E A		U E A	U E A
Other money market	U E A		U E A	U E A
Other: Floating rate not	es A		А	А
Pfandbriefe/covered bo	nds E		Е	E
Sovereign securities	ΕA		ΕA	ΕA
Sub-sovereign securitie	E A		ΕA	ΕA
Supranational securitie	U E A		U E A	U E A
Agency securities Canada Futures High-grade corporate Other money market Other: Floating rate no Pfandbriefe/covered bo Sovereign securities Sub-sovereign securities	U UEA UEA ads E EA s EA	-	U A UEA UEA A E E A E A	UEA UEA UEA A E E A EA EA

<sup>1</sup>Note that all products are in AUD only except for Asian sovereign securities that are AUD and NZD only.

### Platform provides direct access to trade clearance and settlement functions through: Charles River and can export a file to AUSTRACLEAR via a link

# Trading platform is compliant with FIX Protocol version 4.4, supporting FIX 4.4, FIX 4.2, XML and other integration interfaces.

## Services other than price discovery/trade execution offered or plan to offer to users of the platform:

Confirmation/allocation – Currently Offered Order management – Currently Offered via Charles River Regulatory/compliance – Currently Offered Identity management – Currently Offered

### **Zions GovRate**

Zions Bank Capital Markets 1 South Main Street Salt Lake City, Utah 84111 1.801.524.4640 www.govrate.com

#### Market:

Single dealer-to-(buy-side) customer Multiple dealer-to-(buy-side) customer

### **Platform Supports:**

Primary market new-issues and secondary market trading

### **Trading Method:**

Order driven Market-making or Cross-matching Request for quote.

### Market Participants Eligible/Not Eligible to Use Platform Directly:

Dealers as providers of liquidity –Eligible Dealers as consumers of liquidity – Eligible Institutional investors ("buy side") – Eligible Retail investors – Not Eligible

### Platform does not have dedicated liquidity providers and market makers.

### Platform does not have a minimum trade size.

# Information available to all trading system participants in real-time for trades executed on this platform:

Coupon	Maturity	Yield of trade
CUSIP/ISIN number	Spread to benchmark	
Issuer name	Trade size	

### Products traded on the platform and the types of trade:

(U = US Products)	E = European Products		A = Asian Products)	
Product	Cash	Repo	Basis	Spread
Agency securities	U			
High-grade corporate	U			
Municipal securities	U			
Treasury securities	U			

### Platform does not provide direct access to trade clearance and settlement functions.

Trading platform is compliant with FIX Protocol version 4.4.

# Services other than price discovery/trade execution offered or plan to offer to users of the platform:

Confirmation/allocation - Currently Offered

## **GLOSSARY OF TERMS**

- Auction Trading Method –A market in which the prevailing price is determined by prospective buyers entering competitive bids simultaneously, most common for newly issued instruments offered to the market by issuers.
- **Basis Trade** A simultaneous trade of either a purchase or sale of an instrument (the cash leg) and the corresponding sale or purchase of its futures equivalent (the futures leg). The tradable price is formed based on the difference between the spot price and the futures price of the underlying instrument.
- **Confirmation and Allocation Services** Users can obtain electronic trade confirmations and/or use the platform to allocate trades among several accounts.
- **Direct Feed of Dealer Inventory into Buy-side Portfolio** A service where a dealer counterparty to a trade automatically updates the portfolio or order management system records of a buy-side counterparty after trade execution to reflect changes in the portfolio.
- **Electronic Research Delivery** Users can obtain research products produced by dealers or third-party providers.
- **Identity Management Services** Advanced login features that allow users to monitor or control access to certain functions or services.
- Market Making or Cross-matching Trading Method A market where an institution must make consistent buy and sell quotations for a certain period of time in a selection of instruments traded. These quotes may be "hit" or "lifted" at any time where two market makers' bid and ask prices on the same instrument cross.
- **Order Driven Trading Method** A market where orders are entered by participants into a central order book of the trading system and may be accessed by any participant on the market. Normally, the matched trades will be cleared through a central counterparty or through a particular settlement institution.
- **Order Management System (OMS)** Users can view and manage orders and positions on a real-time basis, in some cases across all traders within a firm or group.

- **Pre-trade Analytics** Users can access research, data and analYieldical functions to develop or test trade ideas before actual execution.
- **Pricing data** -- Users can access a database of all trades executed on the system and, in some cases, trades executed on other platforms or by voice.
- **Regulatory Compliance Services** Assists users in complying with certain regulatory requirements such as record keeping or due diligence in price discover.
- **Request for Quote Trading Method** A system in which an institution, usually a buy-side firm, requests a buy or sell quote from a limited number of other institutions, typically dealers. Upon receipt of a quote, the requesting institution may enter into a trade.
- **Risk Monitoring or Management Services** Allows users to apply risk assessment functions or models to portfolio holdings or monitor and control portfolio risk for individual traders or across a group or firm.
- **Spread Trade** A simultaneous purchase and sale of one instrument and the corresponding purchase or sale of another instrument whereby the tradable price is formed based on the differential between the spot prices of the underlying instruments.

## METHODOLOGY

Our survey was conducted in September and October 2006. The survey involved a written questionnaire sent to 74 trading platform vendors. In some cases, answers were clarified through direct interviews. We received responses from 62 trading platforms. For the first time this year our survey includes responses from platforms that are based in Canada, Australia and Asia as well as the U.S. and Europe.



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