

# **TSOX** <GO> **Electronic fixed income made easy.**

Fixed income execution management

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# TSOX <GO>

# Trading system order execution

## **Our clients**

- Over 780 firms in Europe and CA
- 1000 firms globally use TSOX for fixed income

## **Unique to Bloomberg**

- Integrated with Bloomberg data, analytics, charting, news and Launchpad
- Broker neutral execution
- Post-trade fixed income TCA link

## **Coverage & liquidity**

- Cash bonds (Govt., Corps, EM, SAS, etc.), IRS, CDS, Bond futures
- Deep Liquidity pool — Bloomberg FIT coupled with the ability to connect to various third-party order book platforms

## **Dedicated client support**

- 24/7 Global trade desk support
- Dedicated project management team for TSOX

## Fixed income asset classes

### Extensive coverage of fixed income instruments

Over 1.7 Million individual issues, including:

- Government bonds
- Corporate bonds
- Supras/Agencies/Sovereigns
- Emerging markets
- Mortgage-backed securities
- FRNs
- Municipals
- TBAs
- Preferreds
- Certificates of deposit
- Repos
- Loans
- Interest rate swaps
- Credit default swaps
- Financial and physical futures
- Foreign exchange (AIM only)

### Easy search by

- Issuer name
- Issue type
- Customized parameters for example:
  - Distressed bonds with coupons coming due
  - UKT maturing debt
  - Bank capital issuance

The screenshot displays a 'Fixed Income Search' interface. At the top, there are tabs for 'Build/Edit Search', 'My Searches', and 'Example Searches'. Below these is a 'Build with Criterion' button and a sub-tab 'Build by Merging Saved Searches'. The main search area is divided into two sections: '1. Select Universe' and '2. Criteria'. In the '1. Select Universe' section, 'Asset Classes' is set to 'Corporates' and 'Sources' is set to 'All Securities', resulting in '1,691,573 securities'. The '2. Criteria' section is active, showing a table with columns for 'Field', 'Boundaries', 'Selected Criteria', and 'Matches'. The first criterion is 'Security Status' with a boundary of 'Include' and a selected criterion of 'Bonds: Active', resulting in '294,039' matches. The second criterion is 'And' with a boundary of '99) Fields'. At the bottom right, it shows '294,039 securities' and a 'Results' button.

Field	Boundaries	Selected Criteria	Matches
31) Security Status	Include	Bonds: Active	294,039
32) And	99) Fields		

## TSOX information discovery

### Unrivalled price transparency

The screenshot displays the TSOX trading platform interface with several key components:

- Market Depth / ALLQ Quotes:** A table showing performance criteria for various instruments.
 

Instrument	Broker	Bid Px	Ask Px	Byld	AYld	BSz	ASz	PEX	HR	Ex%	HR Vol%	OS%	VWS%	D/Quit%	Time
MTF4	MTF5	D1	99.855	100.063	2.437	2.397	6000	100	13.59	50.19	54.72	59.60	0.93	60.57	16:34
MTF6	Q15	D3	99.689	100.064	2.469	2.397	5100	100	11.07	42.42	42.64	51.49	0.80	15.14	16:34
Q6	TD08	D4	99.657	100.095	2.476	2.391	100	1300	14.54	71.21	50.03	73.96	0.22	72.27	16:34
TD09	TD10	Q1	99.649	100.234	2.477	2.364	1000	1000	21.14	74.54	76.61	87.53	0.84	8.62	16:34
TD11	TD12	D2	101.051	102.051	2.209	2.020	2147500	2148500	40.01	57.36	56.76	20.60	0.01	3.71	08:37
- Performance Criteria:** A section for setting and viewing performance criteria, including filters for HR Vol%, D/Quit%, and Ticket Size.
- Stop Monitoring:** A panel for monitoring specific instruments, such as VOD 5 06/04/18 Corp, with buttons for Buy, Sell, and Settings.
- Dealer Quote:** A detailed view of a dealer quote for VOD 5 06/04/18 Corp, showing bid and ask prices, yields, and dealer information.
 

Dealer	Firm Name	Bid Px	Ask Px	Bid Yld	Ask Yld	BSz(M)	ASz(M)	Time
D1	Dealer D1	116.617	116.997	1.442	1.375	500	200	16:34
D2	Dealer D2	116.530	117.043	1.456	1.363	1000	1000	16:34
D4	Dealer D4	116.576	117.139	1.449	1.345	1000	x	16:34
D3	Dealer D3	116.592	117.033	1.446	1.366	1000	x	16:35
Q1	Dealer Q1	116.749	117.036	1.415	1.365	250	250	16:33
BB	Dealer BB	116.587	117.411	1.445	1.292	1000	1000	16:33
D2	Dealer D2	116.740	117.287	1.417	1.317	1000	x	16:35

### TSOX provides pre-trade transparency

- 1. ALLQ**  
The embedded ALLQ window with Bloomberg's extensive dealer network, provides live price updates for the securities highlighted.
- 2. Quotes manager**  
Our message scraping service will search your Bloomberg messages for Dealer Runs and Axes containing Indications of Interest (IOIs) of the instruments you have staged and want to trade.

- 3. Exchanges**  
Take full advantage of the real-time liquidity posted on third-party platforms by monitoring, executing and posting Bids/Offer/s into the Order Book/s.

## Pre-trade analytics

### Systemic methodologies for counterparty selection

#### ALLX

ALLX provides a powerful real-time decision making tool for buy-side execution traders. The core feature is the ability for clients to configure Dealer Performance Criteria and apply them pre-trade to better understand how dealers are servicing them. ALLX is accessible from TSOX ALLQ via the ALLX tab.

Performance Criteria

Set Performance Criteria

HR Ex% | D/Quit% | Inventory (MM)

6 out of 6 dealers have HR Ex% All and D/Quit% All

Broker	Bid Px	Ask Px	BYld	AYld	BSz	ASz	PEX HR Ex%	HR Vol%	OS%	VWS%	D/Quit%
CBBT	100.214	100.687	2.359	2.269			N.A.	N.A.	N.A.	N.A.	N.A.
P D2	100.310	100.521	2.350	2.310	1000	1500	40.38	57.36	56.76	20.60	0.01
P Q2	100.164	100.838	2.378	2.250	1000	1000	43.14	54.60	17.72	14.36	0.40
P Q1	100.232	101.031	2.399	2.254	300	200	21.14	74.54	76.61	87.53	0.84

#### Select Best (SB)

Powerful counterparty selection methodology based on live streaming prices and posted inventory.

TSOX Staging | Activity Panel | List Monitor | Blotter | Exchange Blotter

Broker: Select top PE

Broker	Status	Action	Leave	IB	SB	SPEX	Venue	Security	Settle Date	Side	Qty (M)	Currency
A001	NEW	Send					EUR	SWAP ANN (VS 6M) 10Y	2/ 1/2018	PAY	5000	EUR
BBWS	NEW	Send	Leave	IB			RXZ7	EUR	1/31/2018	BUY	250	EUR
BBXD	NEW	Send	Leave	IB			BMTF	T 2 3/4 11/15/27	1/31/2018	BUY	1M	USD
D1	NEW	Send	Leave	IB			BMTF	UKT 4 3/4 12/07/27	1/31/2018	SELL	650	GBP
D3	NEW	Send	Leave	IB			BMTF	AAPL 2.4 05/03/23	2/ 1/2018	BUY	1M	USD
D4	NEW	Send	Leave	IB			BMTF	AMZN 5.2 12/03/25	2/ 1/2018	SELL	700	USD
D5	NEW	Send	Leave	IB			BMTF	VOD 5 06/04/18 EMTN	1/12/2018	BUY	10M	EUR
D6												
DOR1												
DOR2												

#### PEX (Profiler of Execution)

PEX is a pre-trade analytical tool that supports your decision making process when placing specific orders with dealers. PEX assesses historical trade performance by considering the order's attributes (i.e., Ratings, Maturity, Size) relative to the dealer's capabilities and mandates, along with personalized weightings that you can apply. PEX Scores are generated to help you identify and select (SPEX) the counterparties most likely to provide the best trading experience, maximizing the efficiency of your trade.

AAPL 2.4 05/03/23 Corp

PEX Component-Ratio Editor

Sector: Technology  
SubSector: Communications Equipment  
Rating: High Term Medium  
Side: Buy Sell Size: 1000 M  
Voice Trades Only

0 10 20 30 40 50 60 70 80 90 100

Dealer	PEX	Readiness	Response	Performance
1) BB1	50	0	86	66
2) BBLP	47	79	33	33
3) BSTW	47	0	76	66
4) DOR1	45	0	72	65
5) Q2	43	0	33	97
6) JCRP	41	58	33	33
7) BBPI	40	56	33	33
8) D2	40	0	33	89
9) DBDK	40	57	33	33
10) BB	39	0	84	35
11) BSCM	38	49	33	33
12) DBNA	38	49	33	33
13) DOR5	38	0	33	82

Profiler of Execution Response Performance

## TSOX trade execution – I

### Electronic trading on Bloomberg – single orders

#### Available execution styles

##### Request-for-Quote

Sending an RFQ to multiple brokers simultaneously for accurate execution as well as satisfying Best Execution Requirements.

Market Depth / ALLQ Quotes*									
Spreads vs T 2 <sup>5</sup> 12/31/23									
Performance Criteria									
Broker	Bid Px	Ask Px	↑	BSpd	ASpd	BSz	ASz	PEX	Time
CBBT	96.789	97.301		67.5	54.4				11:32
D3	96.560	96.973		74.6	64.4	6000	1000	43.50	11:31
Q1	96.956	97.207		64.5	58.3	1000	1000	14.66	11:31
D4	96.828	97.239		67.8	57.5	200	1200	18.83	11:22
BB	97.063	97.259		62.0	57.0	200	200		11:31

##### Leave order

TSOX gives you the ability to leave a Market, Limit, MOC (Market on Close) and MOO (Market on Open) order, for your chosen Dealer to work over time.

TSOX Leave Order									
Order Summary		Security Description		Side	Amount				
AAPL 2.4 05/03/23				Buy	1,000,000.00				
Order Settings									
Dealer	Order Type	MOC Time	Limit Price	Quote Type	AoN	TIF	Date	Time Set.	Cur. Account
D1	LIMIT		100	Price		DAY	09/25/2017	22:10	USD TEST1

#### FOR – Futures Order Routing

From TSOX, you have the ability to route Financial and/or Physical Futures to your chosen Dealer/s to work for you over time.

BUY EURO-BUND FUTURE Dec17 (EUR) MKT DAY									
Last	Change	Bid	Ask	High	Low	Volume	VWAP		
161.91	0.79	161.91	161.92	161.96	161.12	794364			
Price Book		Order Book							
Total	Ord	Size	Bid	Ask	Size	Ord	Total		
89	23	89	161.91	161.92	97	29	97		
299	37	210	161.90	161.93	231	43	328		
521	34	222	161.89	161.94	305	43	633		
754	44	233	161.88	161.95	261	45	894		

#### RFM – Request for Market (convertible bonds only)

Where information dissemination is key for you, TSOX allows the request for a two-way price via multi-dealer Request-for-Quote.

TSOX Inquiry Ticket									
Side	Security	Quantity	Settle	Date	Sort by	PX	SB		
Buy	TWTR 0 3/4 09/15/19 US90184LAB80	1000M	T+2	01/14/19	DOR6	Q1	Q2		
Price / Yield					D1	D2	Q11		
Principal					DOR4	A002	D3		
Accrued ( 119 Days )				826.39	DOR5	D4	SSOX		
Net				826.39	D5	A001			
Equity Ticker TWTR US									
		<input checked="" type="checkbox"/> Working Stock	Und. Eq Px.	32.25USD					
		<input checked="" type="checkbox"/> RFM	Target Px						
Options									
Broker		Bid Px	Ask Px	BYld	AYld	BSz	ASz	Time	3) Add Notes
D1		97.299	97.789	4.465	3.699	5100	300	06:37	5) Order Ticket
D2		97.23	97.73	4.521	3.748	1000	2000	01/09	Entity BMTF 1 (I)
More Options									

## TSOX trade execution – II

### Electronic trading on Bloomberg – multiple orders

TSOX supports a number of different Trading & Execution Strategies to suit client needs.

### Single security & partial-fills

#### Multi-security strategies

Switches, Butterflies, Rolls.

#### Electronic lists

Send lists/baskets of Securities, both Buys and Sells to a select list of Dealers for efficient and fast execution of multiple orders.

#### Aggregated orders

Aggregate securities with the same ISIN/ID, share same settlement and direction for efficient Price Discovery and Execution at Block Level.

#### Bid or Offer List Trading (BOLT)

List trading application that allows you to Electronically submit up to 40 Bids or Offers in Investment Grade, High Yield, USTs, Emerging Markets (EM), CDS, IRS or Municipal Bond securities to dealers for execution. BOLT allows you to trade on spread, price, yield or discount margin. You can negotiate spread- and price-traded securities in real time, spot spread-traded securities, and monitor trade lists.

Type	Side	Security	↑ Qty (M)	Venue	Status
	<b>BASK</b>	<b>ELECTRONIC LIST</b>			<b>NEW</b>
I	BUY	->AAPL 2.4 05/03/23	1M	BMTF	NEW
I	SELL	->AMZN 5.2 12/03/25	700	BMTF	NEW
I	BUY	->BAC 4 04/01/24 MTN	500	BMTF	NEW
I	BUY	->DELL 5.4 09/10/40	750	BMTF	NEW
I	SELL	->VOD 5.45 06/10/19	2M	BMTF	NEW
I	SELL	VOD 5 06/04/18 EMTN	2850	BMTF	AGG NEW
I	SELL	->VOD 5 06/04/18 EMTN	2M	BMTF	NEW
I	SELL	->VOD 5 06/04/18 EMTN	850	BMTF	NEW

Credit	1) Lists	2) Options	3) Get Enabled	Bid/Offer List Trading	
2) List Entry		2) List Activity Panel		2) Intraday Blotter	
Name	PALBAN 09/26/17 11:49:20	Side	Bids Wanted	Due In Time	1 min
Wire Time	2 m		0 s		
Spotting Model	BlpCalc		00:00 AM		
<input checked="" type="checkbox"/> Auto Confirm Price					
Security	Qt	Benchmark	CBBT Amt(M)	Corp Settle	Alloc
1. AAPL 2 05/06/20	S	T 1 3/8 09/15/20	99-14 1/8	1M 09/28/17	Alloc 0
2. VOD 5 06/04/18	P			2M 09/28/17	Alloc 0
3. AMZN 4.8 12/05/34	S	T 3 05/15/47	104-30 3/4	1.5M 09/28/17	Alloc 0
4. BAC 4 04/01/24	S	T 2 1/4 08/15/27	100-08 3/4	500 09/28/17	Alloc 0
5. DELL 5.4 09/10/40	P			750 09/28/17	Alloc 0
6. DIS 4 3/8 08/16/41	S	T 3 05/15/47	104-30 3/4	900 09/28/17	Alloc 0
7. DUK 3 3/4 04/15/24	S	T 2 1/4 08/15/27	100-08 3/4	2M 09/28/17	Alloc 0
8. EBAY 2 7/8 08/01/21	S	T 1 5/8 08/31/22	98-31 7/8	1.75M 09/28/17	Alloc 0
9. GS 2.9 07/19/18	K			500 09/28/17	Alloc 0
10. PEP 4 1/4 10/22/44	S	T 3 05/15/47	104-30 3/4	1M 09/28/17	Alloc 0
11. PX 3 09/01/21	S	T 1 5/8 08/31/22	98-31 7/8	1.2M 09/28/17	Alloc 0
12. VZ 4 1/2 09/15/20	S	T 1 3/8 09/15/20	99-14 3/4	1.1M 09/28/17	Alloc 0



## TSOX trade execution – III

### Electronic trading on Bloomberg – third-party venues

TSOX now includes U.S., European Corporate and EM (Emerging Markets) bonds trading on a number of third-party venues. Integrated access to various electronic execution platforms enables traders using TSOX to execute on a third-party venue directly from the Bloomberg Terminal®. Users can benefit from enhanced price discovery by viewing real-time ticking prices alongside their staging blotter for orders, and benefit from a streamlined, click-to-trade protocol and the convenience of leaving a resting order directly from the Terminal.

**Currently available venues** – MTS BondsPro/KCG BondPoint/EM Bonds/Liquidnet FI

Total	Size	Yield	Bid	Ask	Yield	Size	Total
170	170	99.7199	100.2390	66	66		
370	200	99.7000	100.3652	225	291		
470	100	99.6570	100.4216	500	791		
728	258	99.6047	100.4216	500	1291		

**Leave a resting limit order** – (Top) post an anonymous bid/offer on the order book. (Bottom) see your firm’s order in the market, highlighted in pink.

## TSOX trade execution – IV

### Manual/voice based trading

As well as offering a variety of Electronic Routing methods and strategies, TSOX can also cater for the more manual workflows such as Voice and IB (Instant Chat) execution.

### VCON (Voice Confirmation)

TVM (TSOX/VCON Matching): This is aimed at Staged trades that are then executed via Phone/Chat and confirmed via VCON, Bloomberg’s Voice Confirmation offering. TSOX/VCON Matching allows for executed trades to be matched and Confirmed in the TSOX staging blotter.

### IB negotiation

Via TSOX, you have the ability to initiate a negotiation for a selected security, by reaching out to available counterparties via the IB Chat. Pre-defined message requests for bids/offers in the given security, allow for swifter and more open negotiations. VCON matching will then conclude the negotiation for operationally efficient trade execution.



### Voice Taker Workflow (VTW)

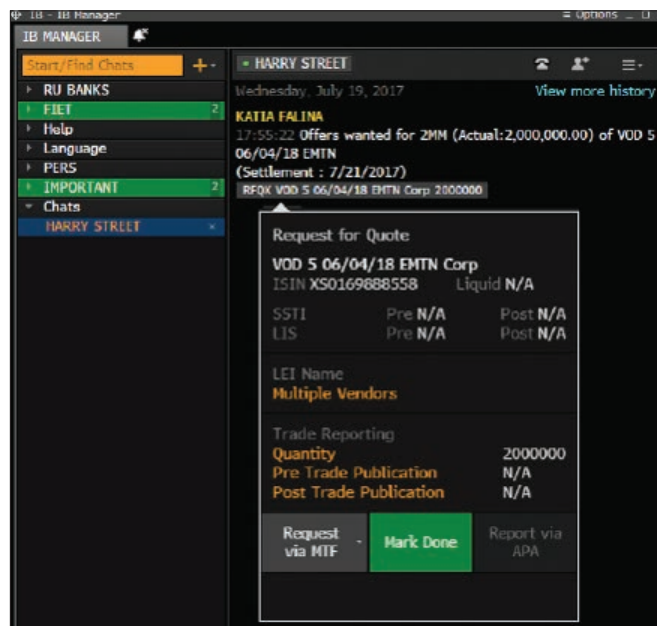
VTW is aimed at the liquidity takers who negotiate and agree trades on IB. VTW links together the execution management system (TSOX), messaging system (IB) and trade confirmation system (VCON) to create a seamless workflow for voice execution and a full audit trail of the trade.

### Best execution (RTS28)

The workflow automatically records quotes in competition provided on IB chats by dealers on a given trade and attaches the quotes audit trail to the done trade record.

### Record keeping (RTS24)

Relevant timestamps are captured throughout the negotiation and trade confirmation to provide data points instrumental for trade reconstruction.



**TSOX feature summary**

TSOX Feature	GOV	AGCY	CORP	CONVERTIBLES	TBA	MBS	MUNI	MMKT SELL	MMKT BUY	FUTURES	IRS	CDS	REPO
Fix & Manual Staging	X	X	X	X	X	X	X	X	X	X	X	X	X
List/Basket Staging	X	X	X	X	X	X	X	X	X	X	X	X	X
Staging with Inclusion dealer list (ETPA)	X	X	X	X	X	X	X	X		X	X	X	
Staging with Restricted dealer list (ETPA)	X	X	X	X	X	X	X	X		X	X	X	
Electronic Trading (RFQ)	X	X	X	X	X			X		X	X	X	
Leave/Care Orders	X	X	X	X		X	X			X			
Voice Taker Workflow (IB)	X	X	X	X		X	X			X			
RFM - Request for Market				X									
TVM (VCON Matching)	X	X	X	X	X	X	X			X	X	X	X
DOR (Direct Order Routing)	X	X	X										
Partial-Fills	X	X	X	X	X	X	X			X			X
Dealer Countering on Size	X	X	X										
List/Basket Trading	X	X	X	X	X								
Bids/Offers List Trading (BOLT)	X*		X		X	X	X				X	X	
Multi-Leg Strategy	X	X	X		X					X	X	X	
Order Aggregation	X	X	X	X	X					X			X
Custom Strategies	X	X	X		X					X	X	X	X
Pre-Trade Allocations	X	X	X	X	X	X	X	X		X	X	X	X
Post-Trade Allocations	X	X	X	X	X	X	X	X	X	X	X	X	X
Price Alerts	X	X	X		X								
Alerts for Order Staging/Assignments	X	X	X	X	X	X	X	X	X	X	X	X	X
Alerting on Leave Orders	X	X	X			X	X			X			
Select Best (Dealer Selection)	X	X	X	X									
PEX (Profiler of Execution)			X										
Bulk Sett. Updates	X	X	X	X	X	X	X	X	X	X	X	X	X
Staging Blotter Sharing/Delegation	X	X	X	X	X	X	X	X	X	X	X	X	X
Custom Right Clicks	X	X	X	X			X	X	X				
Asset Class Templates	X	X	X	X	X	X	X	X	X	X	X	X	X
Group By	X	X	X	X	X	X	X	X	X	X	X	X	X
Filtering	X	X	X	X	X	X	X	X	X	X	X	X	X
* JGB Only													

## Real-time analytics

### Pre-trade & in-trade analytics

### Bloomberg analytics

TSOX incorporates a variety of BBG tools to give you all the information you need at the time you need it – Price movements, Trade and Portfolio analytics, Alerts on Order Events.

### Easy right-click navigation

Access the most popular analytics functions directly from TSOX with a single mouse-click, all fully customizable:

- **ALLQ** – All Quote Dealer Quotes
- **DES** – Security Description
- **YAS** – Yield & Spread calculations
- **GIP/GP** – Graphs (also intraday price movements)
- **FPA** – Forward Pricing Analysis
- **GY** – Yield History
- **COMB** – Comparable Bonds
- **FIHG** – Fixed Income Hedging

As well as the options of trade assignment and relevant trade modifications:

- Modify order
- Assign trader

The screenshot shows the TSOX trading interface. At the top, there are navigation tabs: <Search>, Add Order, Workflow, and Settings. Below this is the 'Staging Blotter' window, which displays a list of orders with columns for Broker, Action, gd, IB, Leave, Type, Security, Settle, Date, Status, Side, Qty (H), Brokers, Price, Yield, and Spread. A context menu is open over the list, showing various actions such as 'Send', 'Leave with Dealer', 'Route Order Electronically', 'Assign Trader', 'Delete Order', and 'Update Settlement Date'. On the right side, there is a 'Quotes Manager' window showing 'QMGR >> 1 Criteria Applied' and a 'Date Range' of '2 Days'.

The screenshot shows the Bloomberg Yield and Spread Analysis tool. At the top, it displays 'VOD 5 1/8 12/04/25 Corp' with a price of 116.904/117.906 and a spread of 3.751/3.652. Below this, there are tabs for 'Yield & Spread', 'Graphs', 'Pricing', 'Descriptive', and 'Custom'. The main area shows a comparison between 'VOD 5 1/8 12/04/25 (XS0181816652)' and 'UKT 5 03/07/25'. It displays various metrics such as Spread (114.93 bp vs 123.9/115.4), Price (117.906 vs 123.29), Yield (3.618827 vs 2.469495), and Wkout (12/04/2025 @ 100.00 Consensus Yld 6.6). At the bottom, there are sections for 'Yield Calculations' (G-Sprd, I-Sprd, Basis, Z-Sprd, ASW) and 'Risk and Invoice' (Risk, Mod Dur, Face, Principal, Accrued).

## Full Launchpad integration

### Integration with Launchpad

TSOX can run in your Launchpad, which eliminates the need to switch applications if you need to run Analytics during a trade. The TSOX Launchpad Group Manager links various analytics windows to any highlighted staged order in TSOX, improving price transparency, dealer selection and general workflow. In the example below we have linked TSOX to the Bond Description/Evaluation, Charts and the Graphic Dashboard which gives you a snapshot of key information about the security.

The screenshot displays the TSOX(DEMO) interface with several key components:

- Staging Blotter:** A table showing staged orders with columns for Type, Side, Security, Unique Bloomberg, Qty (M), Status, SB, GD, Action, Leave, IB, RFM, Execution Instructions, and BGN Price.
 

Type	Side	Security	Unique Bloomberg	Qty (M)	Status	SB	GD	Action	Leave	IB	RFM	Execution Instructions	BGN Price
I	BUY	-VOD 1 09/11/20 EMTN	COEK4807484	100	NEW		GD	Send	Leave	IB			102.901
I	SELL	-VZ 4 09/15/20	COEJ8170411	250	NEW		GD	Send	Leave	IB			107.380
I	BUY	-D1S 4 08/16/41	COE17873090	250	NEW		GD	Send	Leave	IB			110.988
I	BUY	MID OR BETTER			NEW			Send	Leave				
- Market Depth / ALLQ Quotes:** A table showing spreads and performance criteria for various securities.
 

Broker	Bid	Px	Ask	Px1	BSpd	ASpd	BSz	ASz	PEX	HR
D3	102.750	102.917	72.0	67.0	6000	1000	17.4	33.0		
D4	102.763	102.931	71.5	66.5	1000	2000	12.5	30.5		
Q2	102.799	102.931	70.2	66.5	1000	1000	43.7	44.8		
Q1	102.820	102.955	69.5	65.6	1000	1900	39.3	34.5		
PS	102.773	102.958	71.2	65.6	1000	1000		91.5		
- Bond Description/Evaluation:** A detailed view of the selected security, VOD 1 09/11/20, showing issuer information (VODAFONE GROUP PLC), security details (Euro MTN, Fixed), and various ratings (Moody's Baa1, S&P BBB+, Fitch BBB+, Composite BBB+).
- Charts:** A line chart showing the price history of EK4807484 Corp from September 2016 to September 2017, with the last price at 102.815 and a change of -0.015.
- Graphic Dashboard:** A sidebar on the right containing various analytics including Price (BGN), Spd (BGN), Description, Ratings, Coupon Type, Maturity Type, Callable, Onry / Curr, CDS, Default Risk, and All Quotes PX/Spd.

## Blotter

### Post-trade execution details

From TSOX you can easily access all Post-trade Blotters. Historic Trading Logs also available via the easy-to-use Trade Search feature.

#### Blotter (BLOT <GO>)

Post-trade Execution Blotter for all trades executed via RFQ, Leave, IB/Voice, RFM.

- Check executed trades
- Best execution audit trail
- Allocations
- Clearing status

#### Exchanges blotter

To view all trades done via any of the linked third-party Execution Venues.

- Check filled orders
- Check venue/exchange

Tsox Staging		Activity Panel		List Monitor		Blotter		Exchange Blotter	
Historical Search: 30 Jan 2015-30 Jan 2018									
		View		Personal		Sheet		Default	
		Zoom 100%							
Status	PNT	Side	Security	Price	Yield	Qty (M)	ISIN	Customer	
21)	Accepted	Yes	B	VOD 5 06/04/18 EMTN	102.029	-0.580	10,000	XS0169888558	BLOOMBERG/ LONDON
22)	Accepted		B	D 4 01/15/43	100.000	3.9999	1,000	US927804FL36	BLOOMBERG/ LONDON
23)	Accepted	No	B	D 4 01/15/43	99.697	4.01918	300	US927804FL36	BLOOMBERG/ LONDON
24)	Accepted	No	B	AAPL 2.4 05/03/23	99.121	2.57653	300	US037833AK68	BLOOMBERG/ LONDON
25)	Accepted		B	SPGB 1.45 10/31/27	99.500	1.5045	1,000	ES0000012A89	BLOOMBERG/ LONDON
26)	Accepted		B	VOD 5 06/04/18 EMTN	101.000	2.6740	250	XS0169888558	BLOOMBERG/ LONDON
27)	Accepted		B	DBR 3 ½ 07/04/19 09	106.00000	-0.37052	500	DE0001135382	BLOOMBERG/ LONDON
28)	Accepted		S	TITIM 3 ¼ 01/16/23	111.173	0.991	500	XS1169832810	BLOOMBERG/ QUEEN VICTORIA ST
29)	Accepted		B	VOD 5 06/04/18 EMTN	99.034	6.9123	500	XS0169888558	BLOOMBERG/ QUEEN VICTORIA ST
30)	Accepted		B	VW 1 ¾ 01/16/30 EMT	99.104	1.707	1,000	XS1167667283	BLOOMBERG/ QUEEN VICTORIA ST
31)	Accepted		S	BMW 1 01/21/25 EMTn	99.759	1.035	300	XS1168962063	BLOOMBERG/ QUEEN VICTORIA ST
32)	Accepted		S	VOD 5 06/04/18 EMTN	99.756	5.3820	3,500	XS0169888558	BLOOMBERG/ QUEEN VICTORIA ST
33)	Accepted		B	KFW 10 ½ 12/14/17	101.111	111.7992	5,000	XS1014862731	BLOOMBERG/ QUEEN VICTORIA ST

TSOX Staging		Activity Panel		List Monitor		Blotter		Exchange Blotter	
Dates: 12/30/17 - 01/30/18 14 Refresh									
Status	Security	Side	Qty	Price	Yield	Principal	Accrued	Net Money	Exchange
1. FILLED	POLGB 2 ½ 07/25/18 Govt	B	5MM	103.358		5,167,900.00	64,750.00	5,232,650.00	embonds
2. FILLED	AKBNK 6 ½ 03/09/18 Corp	S	2MM	95.073		1,901,460.00	50,916.67	1,952,376.67	embonds
3. FILLED	SXCOKC 5.55 02/22/18 Corp	B	1MM	100.00		0.00	51,546.58	1,051,546.58	CFETS
4. FILLED	SDBC Float 02/01/20 Govt	B	1MM	100.00		0.00	10,544.02	1,010,544.02	CFETS
5. FILLED	SDBC Float 02/01/20 Govt	B	1MM	100.00		0.00	10,422.83	1,010,422.83	CFETS
6. FILLED	SDBC Float 02/01/20 Govt	B	2MM	100.00		0.00	21,088.04	2,021,088.04	CFETS
7. FILLED	SDBC Float 02/01/20 Govt	B	2MM	99.00		0.00	20,845.65	2,000,845.65	CFETS
8. FILLED	SDBC Float 02/01/20 Govt	B	2MM	100.00		0.00	21,088.04	2,021,088.04	CFETS
9. FILLED	SDBC Float 02/01/20 Govt	B	5MM	100.00		0.00	52,720.11	5,052,720.11	CFETS
10. FILLED	SDBC Float 02/01/20 Govt	S	2MM	99.00		0.00	21,330.43	2,001,330.43	CFETS
11. FILLED	SXCOAL 6.2 PERP Corp	S	2MM	99.9999		0.00	54,695.89	2,054,693.89	CFETS
12. FILLED	SDBC Float 02/01/20 Govt	B	4MM	100.0001		0.00	41,691.30	4,041,695.30	CFETS
13. FILLED	IBM 8 ¾ 11/01/19 Corp	B	220M	114.02		250,844.00	4,350.35	255,194.35	KCG
14. FILLED	TURKGB 10 ½ 01/15/20 Govt	B	1MM	103.332		1,033,320.00	2,596.15	1,035,916.15	embonds
15. FILLED	TURKGB 10 ½ 01/15/20 Govt	B	3MM	103.306		3,099,180.00	7,788.46	3,106,968.46	embonds
16. FILLED	SDBC Float 02/01/20 Corp	B	3MM	42.97803		128,934,081.25	150,000.00	129,084,081.25	CFETS
17. FILLED	SDBC Float 02/01/20 Corp	B	3MM	22.06076		66,182,274.405	150,000.00	66,332,274.405	CFETS
18. FILLED	SDBC Float 02/01/20 Corp	B	3MM	71.82016		215,460,485.25	150,000.00	215,610,485.25	CFETS

## Allocations

### Free STP solutions to optimize your workflow

Pre-trade allocation from your OMS or manually within TSOX.

### Post-trade Allocations Services (for unsolicited orders)

- The BSTP allocations module is available to all clients globally, on all asset classes (bonds, futures, IRS, CDS etc.) from filled TSOX trades.
- Notification is sent to the counterparty to process either over the Bloomberg network or automated through FIX. Allocation status can be monitored real time.
- Clients can store accounts on the Bloomberg Terminal – these can be grouped together into funds and allocations split by percentage, amount or ratio. These can be manually added or drag and dropped from Excel. After trade execution the TSOX STP Status updates to Allocated as the dealer receives the splits. The allocation status can be seen in BLOT <GO> or STP <GO>.

The screenshot displays the Bloomberg Terminal interface. The top menu bar includes 'Workflow', 'Settings', and 'Actions'. The main window is titled 'Fixed Income Blotter' and shows a table of trade data. Below the blotter, a 'Client Allocation' window is open, showing details for a trade and a summary table of allocations.

Trade Dt	Time	Exec Time	(Side)	Security	Qty (M)	Account	Brkr	Status	DLr	Firm	Time	Price Y
21)	09/08/14 11:03:07		S	SPGB 2 <sup>3</sup> , 03/31/15	50,005	TEST1	D1	Covered	5	101.5271	1	
22)	09/08/14 11:03:07		S	SPGB 2 <sup>3</sup> , 03/31/15	50,005	TEST1	D2	TrAway	5	101.4352	7	
23)	09/08/14 11:03:07		S	SPGB 2 <sup>3</sup> , 03/31/15	50,005	TEST1	D3	TrAway	5	101.344		
24)	09/08/14 11:03:07		S	SPGB 2 <sup>3</sup> , 03/31/15	50,005	TEST1	D4	D/Expire	0			
25)	09/08/14 11:03:07	09/08/14 1	S	SPGB 2 <sup>3</sup> , 03/31/15	50,005	TEST1	Q2	Accepted	5	102.156		
26)	09/08/14 11:03:07		B	SPGB 4.60 07/30/19	5,352	TEST1	D1	Covered	5	118.5370	7	
27)	09/08/14 11:03:07		B	SPGB 4.60 07/30/19	5,352	TEST1	D2	TrAway	5	118.4089	8	
28)	09/08/14 11:03:07		B	SPGB 4.60 07/30/19	5,352	TEST1	D3	TrAway	5	118.405		
29)	09/08/14 11:03:07		B	SPGB 4.60 07/30/19	5,352	TEST1	D4	D/Expire	0			
30)	09/08/14 11:03:07	09/08/14 1	B	SPGB 4.60 07/30/19	5,352	TEST1	Q2	Accepted	5	118.503		

Account	Percent	Principal	Accrued	Total
		6,342,280.56	28,328.94	6,370,609.50
ACHIM TEST 1	00	5,708,052.50	25,496.05	5,733,548.55
ACHIM TEST 2	10	634,228.06	2,832.89	637,060.95
	0			

## Import/export & FIX integration

### Free STP solutions to optimize your workflow

#### Import/export or staging

##### Drag & Drop from Excel

By creating an import/export profile in TSOX, you can map the columns of your Excel sheet. We can also provide you a default template which enables you to easily drag and drop orders into TSOX.

##### Connect TSOX with your OMS

If the order creation is done in your FIX compliant OMS, you can stage securities into TSOX. Executions will feed back into your OMS real time. By utilizing your dedicated Bloomberg lines and routers there is no cost involved. Over 6,000 users are already FIX connected with their OMS. Bloomberg is OMS agnostic and can connect to any FIX compliant OMS, including proprietary systems.

##### One-way drop-copy

If you create orders in TSOX you can feed them back into your FIX compliant OMS with a FIX drop-copy session or via SFTP (SSH File Transfer Protocol).

Staging Columns	Excel Columns	Excel Values					Default Values
Type	Type	<Inquiry>	<Orders>	<Swaps>	<Butterfly	<Repo>	Inquiry
Security	Security						
Settle Date	Settlement	mm/dd/yy					
Side	Side	<Buy>	<Sell>				Buy
Qty (M)	Qty (M)	1					
Brokers	Brokers	4 Broker Mapping					
Limit Price	Limit Price						
AllocAccount	Account						
Stip	Stip						
Stip Notes	Stip Notes						
Req Px	Request Px						
Internal Instructions	Instruction						
Time-in-Force	Time-in-Force						
Good-Till-Date	Good-Till-Date						DAY
Benchmark	Benchmark						
Quote Type	Quote Type						
Order Type	Order Type	<Market>	<Limit>				Market
CCP	CCP						
Limit Spread	Limit Spread						



## Compliance – I

### Compliance management (AIM only)

#### CMGR <GO>

CMGR allows you to establish and apply compliance guidelines for fixed income assets, monitor firm-wide exposure, perform risk analysis and run compliance reports, so you can minimize risk by performing real-time compliance tests through the entire lifecycle of a trade.

You can create and apply compliance rules on pre- and post-trade bases and apply these rules to any level of your firm’s structure (e.g., to one or many accounts).

#### Rules

Create, edit, delete and search for compliance rules, as well as run compliance reports.

#### Watchlist

Create customized lists of restricted securities or issuers, so you can monitor a specific set of issues within the compliance framework.

#### Issuers

Create customized issuers (and issuer lists) from whom you are receiving security and trading data.

#### Brokers

Manage (add, rename, delete) brokers (and groups of brokers) with whom you or your firm are trading.

#### Limits

Set up a monetary limit on trades, including unsettled trades and open orders, executed with a broker or counterparty.

The screenshot shows the 'Compliance Manager' application window. At the top, there are navigation tabs: '<<', '1) Create Rule', '2) Actions', '3) Reports', '4) Settings', and 'Compliance Manager'. Below the tabs is a search criteria panel on the left and a table of results on the right.

**Search Criteria Panel:**

- Search by: **Advanced Search** (dropdown)
- Search Text:
- Match options:  Exact Match,  Partial Match
- Search filters:  Rule Attribute,  Rule ID/Name,  Broker / Group,  Account / Group
- Modified:  -
- Template:
- Buttons: **Search**, **Reset**

**Table of Results:**

Rule ID	Rule Name	Status
1. 4285	4285	Active
2. UCITS12	(NEW)	Active
3. SER_GRP	SER_GRP1	Active
4. AB-ISS61	(NEW)	Active
5. AB-ISS63	(NEW)	Active
6. LIMITPER	limit per isin	Active
7. 10%PAR	Max 10% per par	Active
8. CNY_CNH	csam china test	Active
9. UCITS13	testing	Active
10. RO-FX	FX Check	Active
11. AB-RATNA	(NEW)	Active
12. ANATEST	no back trade dates	Active
13. AB-CCT	(NEW)	Active
14. AB-CCTP	(NEW)	Active
15. AB-TRN	(NEW)	Active
16. CH-BROKE	broker rule	Active
17. PRICE-B	PRICE TOLERANCE TEST IN TSOX	Active
18. CHIEFX	H#751131016	Active
19. CHIEY	chie yoi test	Active
20. TOMS	TOMS training test	Active
21. CASHUSD	cash test	Active
22. C-SHORT	chie test	Active

At the bottom of the window, there is a status bar with the following items: 10) Rules, 11) Watchlist, 12) Issuers, 13) Brokers, 14) Refresh, 15) Limits.

## Compliance – II

### FI Buy-side compliance management (ETPA <GO>)

ETPA allows you to manage fixed income electronic trading compliance rules, so you can:

- Set trade limits (and comply with ERISA legislation).
- Reduce operational risk by processing a high volume of transactions.
- Manage trade activities with efficiency and transparency.
- Approve/Decline Dealer enablement for traders.
- Create and apply trading rules, set up trade limits based on the currency and amount traded, and see a full audit trail of these updates.

If you are a Buy-side administrator, you can apply rules and limits to specific dealers and market sectors for individual traders, groups of traders, offices or entire firms.

91) Edit		92) Group Management		93) Reporting		Limit Setup		
Firm#	9001	Firm name	BLOOMBERG L.P.					
<input checked="" type="radio"/> Firm Level <input type="radio"/> Customer Number		<input type="radio"/> Customer Number		<input checked="" type="radio"/> Trader				
Market Sector	Base Currency	Trade Limit (M)						
1) Agencies	USD	OFF	BLOCK/OFF					
2) Asian Govts	USD	OFF	BLOCK/OFF					
3) Canadian Govts	USD	OFF	BLOCK/OFF					
4) CDS	USD	OFF	BLOCK/OFF					
5) Corporates	USD	OFF	BLOCK/OFF					
6) Covered Bonds	USD	OFF	BLOCK/OFF					
7) Euro Govts	USD	OFF	BLOCK/OFF					
8) IRS	USD	OFF	BLOCK/OFF					
9) MBS	USD	OFF	BLOCK/OFF					
10) Money Markets	USD	OFF	BLOCK/OFF					
11) Municipals	USD	OFF	BLOCK/OFF					
12) Other Govts	USD	OFF	BLOCK/OFF					
13) Repo	USD	OFF	BLOCK/OFF					
14) Supras and Sovs	USD	OFF	BLOCK/OFF					
15) US Treasury	USD	1000000	BLOCK/OFF					

91) Edit		92) Group Management		93) Reporting		Dealer Permission		
Firm #	9001	Firm Name	BLOOMBERG L.P.					
Firm Level	Customer Number							
Customer Number Level	Market Sector	Corporates						
	Dealer					<input checked="" type="checkbox"/> All Dealers		
	Default Trading Rule	ENABLED				Add/Update		
Set default trade rule which applies to a specific market sector.	Cust #	MktSec	Dealer	Rule				
	1) All	Agencies	All Firms	WARNING	DEL			
	2) All	All	JEFF - JEFFERIES	BLOCKED	DEL			
	3) All	Asian Govts	All Firms	WARNING	DEL			

## Snapshot Records

### Data snapshot management service

Bloomberg Snapshot Records service allows you to automatically and seamlessly capture, preserve and later examine the pricing and dealer selection data that you deem important to document your best execution practices. Market data that appears on screens such as QMGR, ALLQ and TRACE, as well as suggested dealer selection such as PEX, will be preserved at certain points (events) in the order lifecycle. Bloomberg will define those events (for example, order arrival, route, fill, etc.) — and you will be able to select which data is important for you to preserve at those events. The data will be saved and made available for a period of 7 years, fulfilling the Best Execution documentation requirements.

In addition to the data, you will be able to enter notes related to the captures and/or events. The notes will be attached to the order and be available for examination.

The data capture is available for examination from screens such as TSOX, AIM Audit (AUDT) and Blotter (FAXM). From TSOX, the link can be found on the right click menu (launch Snapshot Records – as below) from any staged security.

Side	Qty(M)	Security	Order Num	Order Notes	
SELL	3500	VOD 5 06/04/18	1611869	0	
Event	Snaps	Description	User	Timestamp	Notes
New Order	4	Sell 3.50M VOD 5 06/04/18 @ Market	PIERPAOLO ALB...	10/10/17 04:40:15	0
Data Snaps for New Order					
Source	Value	Timestamp	Notes		
EXCH	Price: 0/0	10/05/17 12:00:00	0		
BVAL	Price: 103.37/103.4 BVAL Bid Score: 9	10/10/17 04:00:00	0		
CBBT	Price: 103.35/103.43 Spread to Benchmark: 40.08/34.41/28.73	10/10/17 04:40:11	0		
PEX	D1: 61 FIET: 48 Q4: 44 D5: 42 BB: 41	10/10/17 04:40:15	0		
Notes					

Side	Qty(M)	Security	Order Num	Order Notes	
SELL	3500	VOD 5 06/04/18	1612509	0	
Event	Snaps	Description	User	Timestamp	Notes
New Order	4	Sell 3.50M VOD 5 06/04/18 @ Market	PIERPAOLO ALBA...	10/10/17 10:31:40	0
Route	4	Route 1.00M to 1 Broker: D1	PIERPAOLO ALBA...	10/10/17 10:31:54	0
Fill	4	Fill 1.00M by D1 @ 101	PIERPAOLO ALBA...	10/10/17 10:31:59	1
Route	4	Route 2.50M to 5 Brokers: D1,D3,D4,D5,D6	PIERPAOLO ALBA...	10/10/17 10:32:57	0
Data Snaps for New Order					
Source	Value	Timestamp	Notes		
EXCH	Price: 0/0	10/05/17 12:00:00	0		
BVAL	Price: 103.37/103.4 BVAL Bid Score: 9	10/10/17 07:00:00	0		
CBBT	Price: 103.35/103.43 Spread to Benchmark: 40.77/34.69/28.62	10/10/17 10:31:33	0		
PEX	D1: 61 FIET: 48 Q4: 44 D5: 42 BB: 41	10/10/17 10:31:40	0		
Notes					
1. Fill Event at 10/10/17 10:32:26 by PIERPAOLO ALBANO					
1. Fill Event at 10/10/17 05:50:01 by PIERPAOLO ALBANO					
Exec first 1mio with D1 due to price maker particularly Axe'd.					

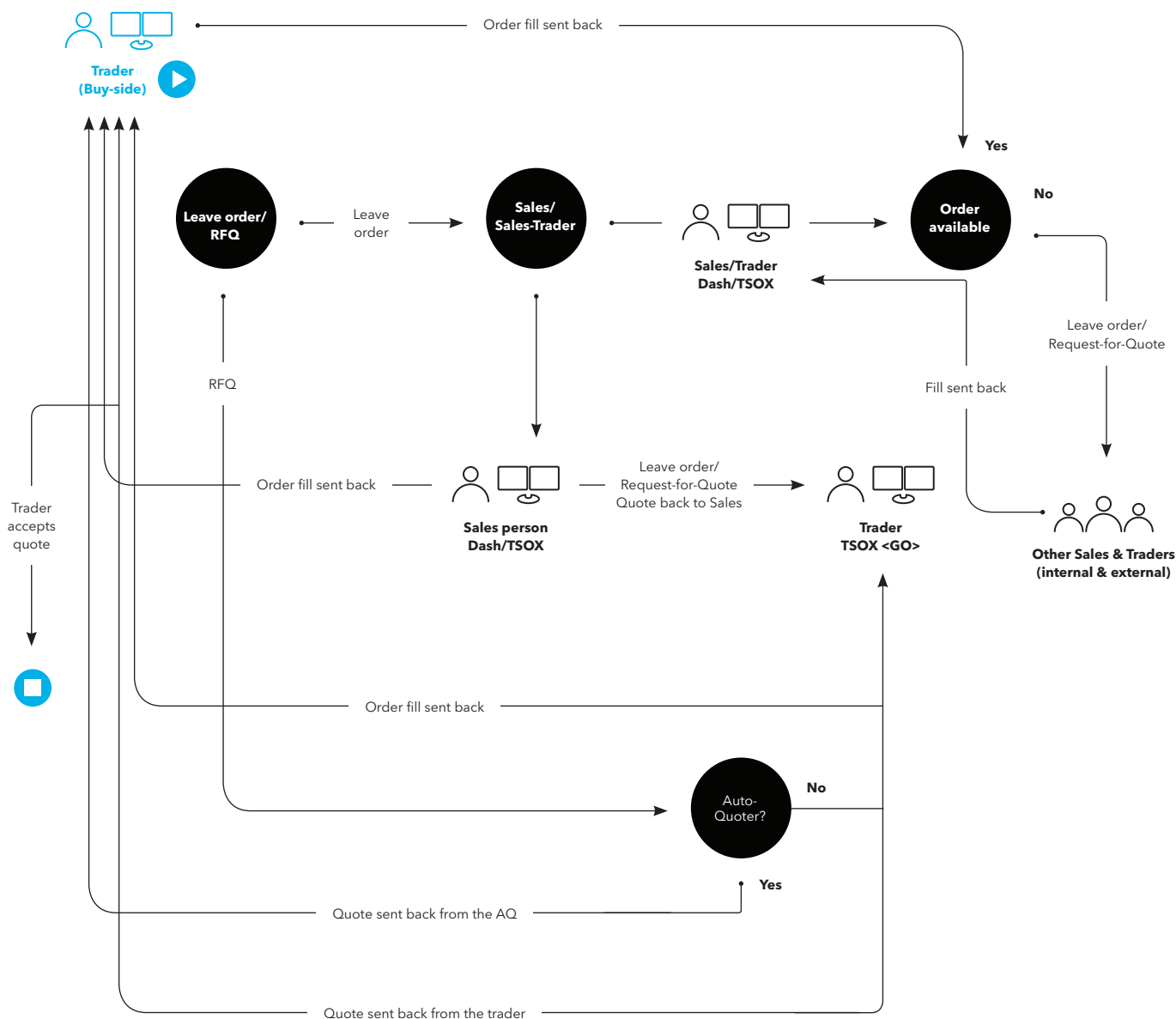
Security	Settle Date	Side
VOD 5 06/04/18 FMTN	11/2/2017	BUY
VOD 5 06/04/18		BUY
TKAGR 1 3/4		SELL
HTHROW 1 1/2		SELL
SANUK 1 1/8		BUY
HSBC 5 1/4 PE		BUY
BNFP 1 1/8		BUY
ROSW 0 7/8		BUY

- Audit
- Modify Instruction and Notes
- Snapshot Records**
- GP
- PEX
- YA
- FPA
- ALLQ

## Sell-side

### Sell-side traders hub

- Creates a routing hub for the sell-side to receive orders from the buy-side.
- Supports growth of the agency flow with the ability to 'Leave' orders for a dealer to execute on-behalf of a client.
- Allows dealers to participate as liquidity providers on the Bloomberg platform with minimum set-up, as they can receive an RFQ pop-up from a client inquiry directly on TSOX (e.g., a 'Bloomberg to Bloomberg' solution).
- Expands electronic markets by allowing clients globally to execute orders at Market Price or leave execution instructions, even when local market hours don't overlap with that of the dealer community.



Buy-side clients can either Leave a working order with one of their Dealers, or send an RFQ to their Sell-side Dealers. Sell-side Dealers can now provide liquidity on the Bloomberg platforms with minimum set-up by receiving an RFQ Pop-up from a client enquiry, directly on TSOX.

**Leave**

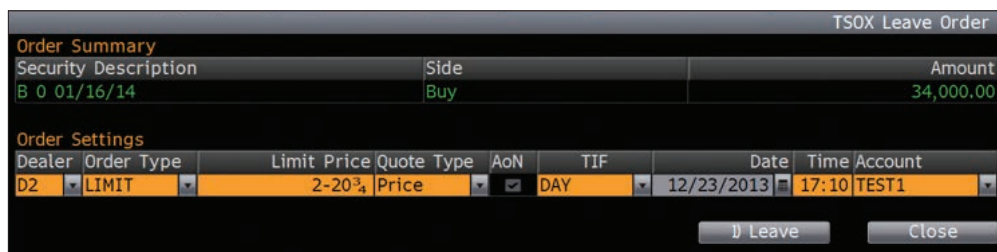
From TSOX, Buy-side clients can engage with their Sell-side Dealers by leaving them an order using the 'Leave' button available in TSOX. Available order types: Market.

**Sell-side manual RFQ**

Sell-side Dealers can also be set up to receive RFQs from clients, which they are able to respond to via a relevant pop-up to alert them of the inquiry received.

**Limit**

- MOC (Market on Close)
- MOO (Market on Open)



## Regulation

### How does TSOX support your regulatory needs

Bloomberg has developed a comprehensive range of integrated solutions to assist clients in meeting their regulatory needs, beginning with Dodd-Frank and now for MiFID II and MiFIR, ahead of the compliance deadline of January 3, 2018. TSOX can display in a clear and concise manner, the regulatory requirements in place, helping clients manage their execution as effectively as possible.

The TSOX blotter has the ability to display a number of key pieces of information related to the various regulations, and display these in the best possible manner for clients to use. The Venue column will show the default Bloomberg Venue available to the client (as per ENFB <GO> settings), for example BSEF if trading Swaps as a U.S. Person, or BMTF for either OTC Derivatives or Cash Bonds depending on the jurisdiction of the client. Along with this, TSOX can display the relevant MiFID II related security information regarding Pre- and Post-trade Transparency reporting.

This includes:

#### Liquid (Y/N)

Is the Instrument considered Liquid?

#### Pre-trade/Post-trade publication

What are the clients Pre-trade and Post-trade Transparency obligations given the staged security?

#### Pre-trade/Post-trade SSTI

What are the Pre-trade and Post-trade SSTI (Size Specific to the Instrument) thresholds?

#### Pre-trade/Post-trade LIS

What are the Pre-trade and Post-trade LIS (Large in Scale) thresholds?

Security	Settle Date	Side	Qty (M)	Entity	Venue	Liquid	Pre Trade Publication	Post Trade Publicatio	Mifid Details
AAPL 2.4 05/03/23	12/26/2017	BUY	300	TSOX workflow testing	BMTF	N	WAIVER	DEFERRED	Mifid Details
IBM 7 10/30/25	12/26/2017	SELL	500	TSOX workflow testing	BMTF	N	WAIVER	DEFERRED	Mifid Details
DIS 7 03/01/32 MTNB	12/26/2017	BUY	1M	TSOX workflow testing	BMTF	N	WAIVER	DEFERRED	Mifid Details
DBR 0 3/2 08/15/27	12/22/2017	SELL	777	TSOX workflow testing	BMTF	Y	REAL TIME	REAL TIME	Mifid Details

## Contact

For further information regarding Bloomberg's Fixed Income EMS, and to book a demo, you can contact your Electronic Trading Solutions representative or the Fixed Income Help Desk via your Terminal.

### Useful functions

**TSOX <GO>** – Trading, Staging & Order Execution

**BEMS <GO>** – TSOX Marketing Site

**FIT <GO>** – Fixed Income Trading

**DFIT <GO>** – Fixed Income Support Documents

## About the Bloomberg Terminal

Since 1981, business and financial professionals have depended on the Bloomberg Terminal for the real-time data, news and analytics they need to make the decisions that matter. The Terminal provides information on every asset class — from fixed income to equities, foreign exchange to commodities, derivatives to mortgages — all seamlessly integrated with on-demand multimedia content, extensive electronic-trading capabilities and a superior communications network.

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## Take the next step.

For additional information, press the <HELP> key twice on the Bloomberg Terminal®.

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