



# TOCOM Trading System Guide

Tokyo Commodity Exchange, Inc.

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## Introduction

Tokyo Commodity Exchange, Inc. (TOCOM) strives to become a prominent derivatives exchange in Asia. TOCOM introduced its new system, which meets international standards on functionality and has the world's highest level of performance, on 7 May 2009.

TOCOM selected a trading/clearing package provided by NASDAQ OMX Group, which already provides since its establishment in 1984 operational support and system implementation to many overseas exchanges. NTT Data, in collaboration with NASDAQ OMX, developed and operates the new system. NTT Data has a high level of know-how based on its over seventeen years of experience in developing/operating the Exchange's systems.

The Exchange's electronic trading system offers the following speed and capacity:

Order Transaction Response Time: 10 milliseconds

Maximum Number of Order Transactions: 1,000 orders/second (or 5 million orders/day)

Maximum Number of Executions: 1.85 million execution/day

By introducing this new system, resulting from the combination of the internationally recognized NASDAQ OMX technology and the exceptional skills of NTT Data in building/operating systems, TOCOM aims to offer a wider range of services to all market participants in a faster and more efficient way, in order for the Exchange to grow and better position itself among global derivatives markets.

## 1. Trading Schedule

### 1.1 Order Acceptance and Trading Hours

Trading hours are separated between a day session (order acceptance: from 8:30; trading: 9:00 to 15:30) and a night session (order acceptance: from 16:45; trading: 17:00 to 23:00 – except for the Rubber market). The night session for rubber is from 17:00 to 19:00 (order acceptance: from 16:45).

	Day Session	Night Session
Precious Metals Market	(8:30)	(16:45)
Oil Market	9:00-15:30	17:00-23:00
Aluminum Market		
Rubber Market	(no lunch break)	(16:45) 17:00-19:00

**Note: wherever stated in this document that the night session closes at 23:00, this shall not apply to the Rubber market (the night session for rubber closes at 19:00).**

## 1.2 Operation Schedule

Trading for all contract months (or all options series) in all commodities starts with an opening auction (*Ita-awase*) at the beginning of both the day session (9:00) and the night session (17:00). The day session is continuous from 9:00 to 15:30 (no lunch break).

	Time (JST)	Order Acceptance	Trading Session	Market Data Distribution
Start online operations	8:00			
Start order acceptance for day session	8:30	Start		
Day session open (for all commodities, all contract months, all options series*)	9:00	Start	Start	
End order acceptance for day session	15:30	End		
End options trade correction Allocation of notified options exercise	15:45			
End futures trade correction	16:00			
Start order acceptance for night session	16:45	Start		
Night session open (for all commodities, all contract months, all options series*)	17:00	Start	Start	
End order acceptance for night session (rubber only)	19:00	End		
End order acceptance for night session (all other products)	23:00	End		
End online operations	24:00			

\* At the opening of the day session (9:00) and the night session (17:00), all contract months (all options series) start trading at the same time

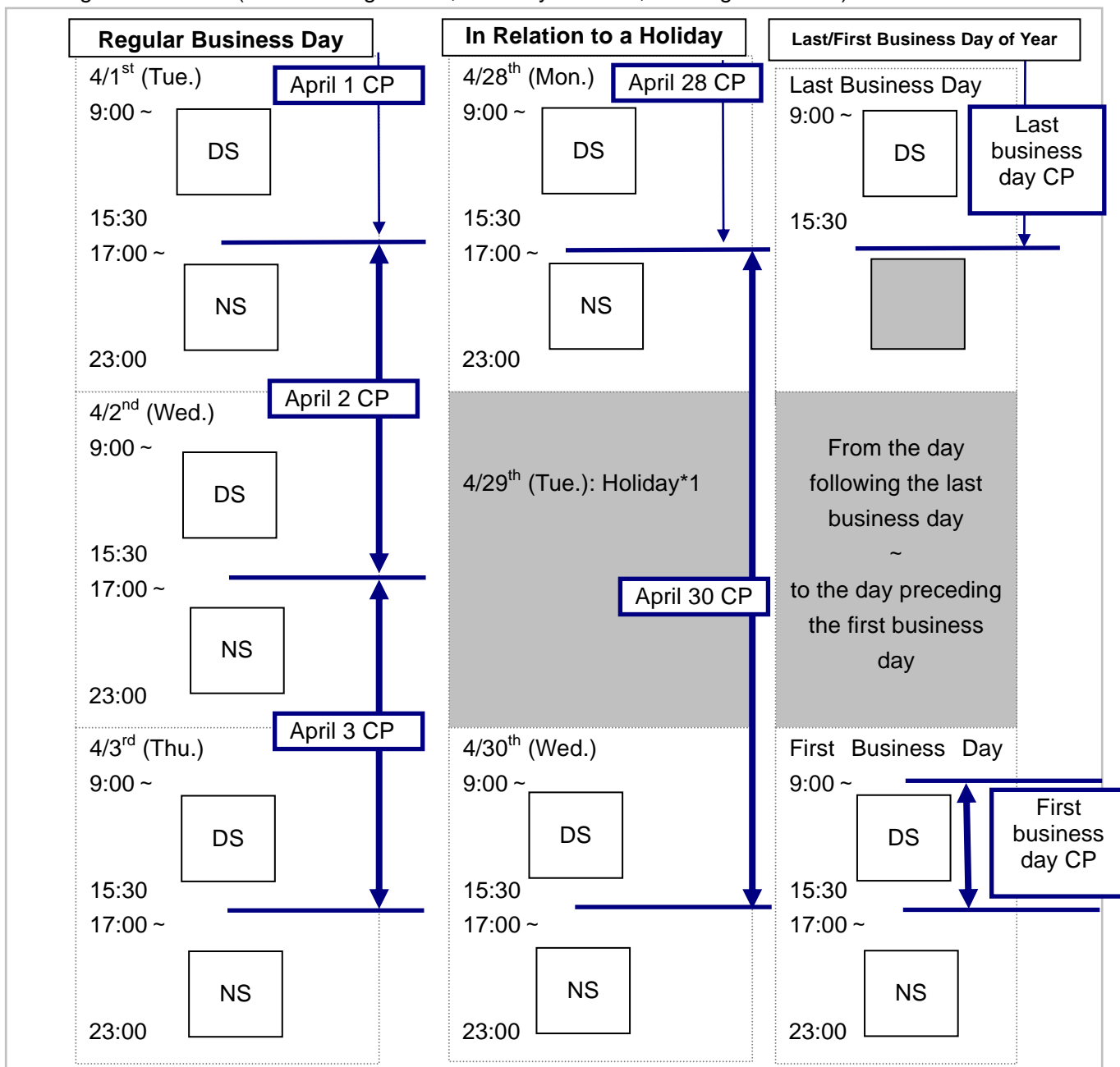
### 1.3 Clearing Period

For a regular business day, one clearing period corresponds to: “previous business day’s night session (from 17:00) + today’s day session (until 15:30).” The end of one clearing period will correspond to the closing of the day session.

The clearing period for the last business day of the year corresponds to: “previous business day’s night session (from 17:00) + last business day of the year’s day session (until 15:30).”

The clearing period for the first business day of the year corresponds to: “first business day of the year’s day session (from 9:00 to 15:30)” since there won’t be a night session following the end of the day session on the last business day of the year.

Clearing Period Chart (CP: Clearing Period; DS: Day Session; NS: Night Session)



\*1: In the case of a holiday, the night session of the day preceding the holiday and the day session of the day following the holiday make one clearing period.

Note: the night session for the Rubber market closes at 19:00 (not 23:00).

## 2. Trading Methods

The trading method is continuous trading (*Zaraba*) with an opening auction (*Ita-awase*). At the opening of the day session (9:00) and the night session (17:00), all contract months (all options series) start trading at the same time.

Type of Transaction	Trading Method
Physically Delivered Futures Transactions	Continuous trading with opening auction
Cash-settled Futures Transactions	
Options Transactions	
Spread Transactions	Continuous trading

### 2.1 Opening Auction (*Ita-awase*)

*Opening Auction* takes place at the start or reopening of a session (following an interruption after a Circuit Breaker has been triggered, for example) and corresponds to a trading method where orders accepted by the Exchange's trading system are all executed at once, in accordance with the conditions prescribed by the Exchange.

Under this method, the price at which a maximum number of orders can be executed becomes the execution price (all of the orders are not necessarily executed). Unexecuted orders with a FaS order validity will be kept in the order book in the continuous trading session.

### 2.2 Continuous Trading (*Zaraba*)

*Continuous trading* takes place between the opening and the closing of a session and corresponds to a trading method where orders are executed whenever a match is possible, in accordance with the type of order/validity. Thus, there are many execution prices formed during *continuous trading*.

Each sell/buy order is ranked in accordance with price priority (i.e: the order with the most advantageous price has priority; a sell order at a lower price has priority and a buy order at a higher price has priority) and time priority (i.e: among orders placed at the same price, the order accepted first by the Exchange's trading system has priority). This price/time priority matching method ensures that order execution is instantaneous.

#### Price Priority

- 1) A buy Limit Order at a higher price has precedence over a buy Limit Order at a lower price.
- 2) A sell Limit Order at a lower price has precedence over a sell Limit Order at a higher price.
- 3) A Market Order has price precedence over other orders.

#### Time Priority

- 1) For orders placed at the same price (i.e: orders that share the same level of price priority), the order received earlier has precedence over the order received later.
- 2) Time priority is based on the time at which an order is registered by the Exchange's trading system (for a Stop Order, the time at which the pre-determined order is placed, once the market conditions specified in the Stop Order are reached).

### 3. Orders

#### 3.1 Order Type and Order Validity

Although the Exchange offers seven types of sell and buy orders, it is possible to produce a variety of orders by specifying the order validity. **The order type and order validity must be specified when placing an order.**

**With regards to order types, please note that Members can choose not to use all of the order types offered by TOCOM. Members may also develop their own specific type of order.**

Order Type		Order Validity	Note
Limit Order	LO	FaS, FaK, FoK	
Market Order	MO	FaK, FoK	During the opening auction, a complete execution is not guaranteed
Market To Limit Order	MTLO	FaS, FaK, FoK	
Best Limit Order	BLO	FaS	
Stop Order	SO		Specify order type (LO, MO, etc.) and corresponding order validity
Standard Combination Order	SCO		Specify order type (LO, MO, etc.) and corresponding order validity
Non-Standard Combination Order	NSCO	FoK	Order types available: LO, MO, SCO

Order Validity		Description
Fill and Store	FaS	Any part of the order that was not immediately executed when received is stored in the order book until its validity expires. Order Duration: 1) Session: <ul style="list-style-type: none"> <li>• An order placed in the day session is stored until the end of the day session.</li> <li>• An order placed in the night session is stored until the end of the night session.</li> </ul> 2) GTD (Good 'Till Date): stored until day D (255 days maximum) 3) GTC (Good 'Till Canceled): until the Last Trading Day
Fill and Kill	FaK	Any part of the order that wasn't immediately executed when received is canceled.
Fill or Kill	FoK	If the complete quantity of the order can not be executed, the whole order is canceled.

Note: The TOCOM system handles any order received with a specified order duration as an executable order until its validity expires.

### 3.2 Order Type Description

#### 3.2.1 LO - Limit Order (order validity available: FaS, FaK, FoK)

An order to buy or sell with a specified price. A sell LO is executed at the specified price or above, while a buy LO is executed at the specified price or lower.

#### 3.2.2 MO - Market Order (order validity available: FaK, FoK)

An order to buy or sell without specifying a price. An MO is executed immediately if there is a corresponding order on the other side of the market, but if there is no corresponding orders on the other side of the market, the remaining part of the order is cancelled (the same shall apply during the opening auction: the MO is executed if there is a corresponding order on the other side of the market, but if there is no corresponding orders on the other side of the market, the remaining part of the order is cancelled).

#### 3.2.3 MTLO - Market To Limit Order (order validity available: FaS, FaK, FoK)

An order to buy or sell without specifying a price. Depending on the order book at the time that the MTLO was received, this order can be processed as follows:

- If there are bids/offers on the other side of the market (i.e: for a sell order a bid and for a buy order an offer), this order is executed as a LO by hitting or taking the best bid/offer.
- FaS: if the MTLO is partly executed, a LO for the remaining part is stored at that execution price.
- FaS: if there is no corresponding order on the other side of the market, a LO is stored at a price one tick better than the best bid/offer.
- If there are no bids and no offers, the order is canceled.

<b>MTLO ILLUSTRATION:</b>		<b>TIME T1</b>					<b>TIME T2</b>				
("Agg.": aggregated number of lots)											
T1: a buy MTLO for 50 lots is placed as FaS.											
T2: the order is processed as a buy LO for the best offer on the other side of the market (JPY 100), 10 lots are executed and the remaining 40 lots are stored in the order book.											
			<b>Sell</b>			<b>Buy</b>					
Lots	Agg.		Agg.	Lots		Agg.	Lots	Lots	Agg.		
30	40	101									
10	10	100									
		99									
		98	20	20							
		97	20								
→											
			<b>Sell</b>			<b>Buy</b>					
Lots	Agg.		Agg.	Lots		Agg.	Lots	Lots	Agg.		
30	30	101									
		100	40	40							
		99	40								
		98	60	20							
		97	60								
T1: a buy MTLO for 50 lots is placed as FaS.											
T2: because there is no offer on the other side of the market, the order is stored in the order book as a buy LO at JPY 99, one tick higher than the best bid (JPY 98).											
			<b>Sell</b>			<b>Buy</b>					
Lots	Agg.		Agg.	Lots		Agg.	Lots	Lots	Agg.		
		101									
		100									
		99									
		98	20	20							
		97	20								
→											
			<b>Sell</b>			<b>Buy</b>					
Lots	Agg.		Agg.	Lots		Agg.	Lots	Lots	Agg.		
		101									
		100									
		99	50	50							
		98	70	20							
		97	70								

### 3.2.4 BLO - Best Limit Order (order validity available: FaS only)

An order to buy or sell without specifying a price. When accepted, this order becomes a LO at a price equal to the best bid/offer on the same side of the market. This order will not have precedence over other LOs at the same price that were placed earlier (in accordance with time priority). If there is no bid/offer on the same side of the market, the order is cancelled.

BLO ILLUSTRATION: ("Agg.": aggregated number of lots)	TIME T1					TIME T2				
	Sell			Buy		Sell			Buy	
	Lots	Agg.		Agg.	Lots	Lots	Agg.		Agg.	Lots
T1: a buy BLO for 50 lots is placed as FaS.	30	40	101			30	40	101		
	10	10	100			10	10	100		
			99					99		
			98	20	20			98	70	20+50
T2: the order is stored in the order book as a buy LO at JPY 98, the same price as the best bid.			97	20				97	20	

### 3.2.5 SO - Stop Order (no order validity available; valid for current session only)

An order that can convert into a MO, LO, MTLO, BLO or SCO if the market reaches designated conditions.

- If the conditions are not met by the end of the session, the order is canceled.
- If the conditions are met, the SO converts into the specified order (i.e: MO, LO, MTLO, BLO or SCO) and said order is placed. That is to say, when the latest execution price in the designated contract month (or options series) reaches the designated price (or is lower/higher than the designated price), the SO converts into the specified order, which is then placed; or when the best bid/offer reaches the designated price (or is lower/higher than the designated price), the SO converts into the specified order, which is then placed. When the conditions are met in the designated contract month (or options series), it is possible for the specified order to be placed not just in this particular contract month (options series) of a market, but in any contract month within the same market division (i.e: Oil Market, Precious Metals Market, Aluminum Market or Rubber Market).

#### Stop Order Examples:

- When the latest execution price in the Gold April contract drops to or below JPY 2,000, a sell MO is placed in the Gold April contract.
- When the best offer in the Gold April contract drops to or below JPY 2,300, a buy MO is placed in the Gold June contract.
- When the best bid in the Gasoline April contract reaches JPY 70,000 or higher, a buy LO at JPY 60,000 is placed in the Kerosene April contract.
- When the latest execution price in the Gasoline April contract reaches JPY 45,000 or higher, a buy MO is placed in the Crude Oil August contract.

**SO ILLUSTRATION:**

("Agg.": aggregated number of lots)

T1: the latest execution price in this contract month is JPY 98. A SO to place a buy LO at JPY 99 for 5 lots, if the execution price reaches JPY 100 or higher, is placed.

T2: A buy LO at JPY 100 for 10 lots is placed and executed at JPY 100.

T3: the SO conditions have been met and, therefore, a buy LO at JPY 99 for 5 lots is placed.

**TIME T1**

**TIME T2**

**TIME T3**

Sell			Buy	
Lots	Agg.		Agg.	Lots
30	40	101		
10	10	100		
		99		
		98	20	20
		97	20	



Sell			Buy	
Lots	Agg.		Agg.	Lots
30	40	101		
10	10	100	10	10
		99	10	
		98	30	20
		97	30	



Sell			Buy	
Lots	Agg.		Agg.	Lots
30	30	101		
		100		
		99	5	5
		98	25	20
		97	25	

**3.2.6 SCO - Standard Combination Order (to be placed with specified order type)**

An order to be used for calendar spreads (2 legs as a single order). An SCO specifies a price differential between 2 contract months in the same commodity (i.e: the price difference between a nearby contract month and a back contract month = nearby contract price - back contract price). A sell order is executed at or above the specified price differential, and a buy order is executed at or below the specified price differential. The price will be negative in Contango, where the back month price is higher, and positive in Backwardation, where the back month price is lower (if there is no price differential, then the price is zero).

A sell order corresponds to a nearby contract sell and a back contract buy. Inversely, a buy order corresponds to a nearby contract buy and a back contract sell.

**SCO ILLUSTRATION: (used here to rollover 10 long positions from the Gold April contract to the Gold August contract, within a price of -JPY 20)**

("Agg.": aggregated number of lots)

**TIME T1** : there is a buy LO at JPY 100 for 5 lots in the Gold April contract and a sell LO at JPY 120 for 5 lots in the Gold August contract. A "sell -JPY 20" SCO for 10 lots is placed in the spread order book (Gold April/August) as a FaS.

Gold April/August Spread

Gold April

Gold August

Sell			Buy	
Lots	Agg.		Agg.	Lots
		-18		
		-19		
		-20		
		-21		
		-22		

Sell			Buy	
Lots	Agg.		Agg.	Lots
		102		
		101		
		100	5	5
		99	5	
		98	5	

Sell			Buy	
Lots	Agg.		Agg.	Lots
	5	122		
	5	121		
5	5	120		
		119		
		118		

**TIME T2 :** the price differential between the buy LO at JPY 100 for 5 lots in the Gold April contract and the sell LO at JPY 120 for 5 lots in the Gold August contract corresponds to “-JPY 20” and, therefore, the SCO is matched (executed) with these orders. The remaining part of the sell SCO that was not executed (5 lots) is stored in the spread order book.

Gold April/August Spread

Sell			Buy	
Lots	Agg.		Agg.	Lots
	5	-18		
	5	-19		
5	5	-20		
		-21		
		-22		

Gold April

Sell			Buy	
Lots	Agg.		Agg.	Lots
		102		
		101		
		100		
		99		
		98		

Gold August

Sell			Buy	
Lots	Agg.		Agg.	Lots
		122		
		121		
		120		
		119		
		118		

### 3.2.7 NSCO - Non-Standard Combination Order (order validity available: FoK only)

An order combining buy and/or sell orders in any 2 contract months within the same market division (i.e: Oil Market, Precious Metals Market, Aluminum Market or Rubber Market). An NSCO specifies a total price for both legs (the amount is positive for a buying price and negative for a selling price). When this specified total price is reached, orders in the specified 2 contract months are executed simultaneously.

#### NSCO ILLUSTRATION:

(“Agg.”: aggregated number of lots)

#### TIME T1 :

An NSCO at “JPY 220” is placed, combining a buy Gold April for 1 lot and a buy Platinum April for 1 lot.

Gold April

Sell			Buy	
Lots	Agg.		Agg.	Lots
	10	102		
	10	101		
10	10	100		
		99		
		98		

Platinum April

Sell			Buy	
Lots	Agg.		Agg.	Lots
	5	122		
	5	121		
5	5	120		
		119		
		118		

#### TIME T2 :

1 lot at JPY 100 for Gold April and 1 lot at JPY 120 for Platinum April are executed.

Gold April

Sell			Buy	
Lots	Agg.		Agg.	Lots
	9	102		
	9	101		
9	9	100		
		99		
		98		

Platinum April

Sell			Buy	
Lots	Agg.		Agg.	Lots
	4	122		
	4	121		
4	4	120		
		119		
		118		

### 3.3 Order Cancellation and Correction

It is possible to cancel orders that have already been placed. It is also possible to correct the order validity, order duration, number of lots, etc. for each order. Depending on the type of correction made, the order priority (execution priority) may or may not be affected (see below for details).

Type of Correction	Time Priority	
Reduction in number of lots	Unaffected	For changes involving a reduction in the number of lots (e.g: from 5 lots to 3 lots), time priority will be maintained.
Increase in numbers of lots	Affected	For changes involving an increase in the number of lots (e.g: from 3 lots to 5 lots), time priority will be lost.
Price amendment	Affected	For changes in price, time priority will be lost.
Order duration amendment	Unaffected	The extension or reduction of the order duration for FaS orders will not affect time priority.

## 4. Rules to Determine Execution Price

### 4.1 Rules to Determine Execution Price in Opening Auction (*Ita-awase*)

If there are corresponding buy and sell orders, including LO, the execution price is determined in accordance with the below conditions. If there are only corresponding Market Orders (MO), the MOs are cancelled.

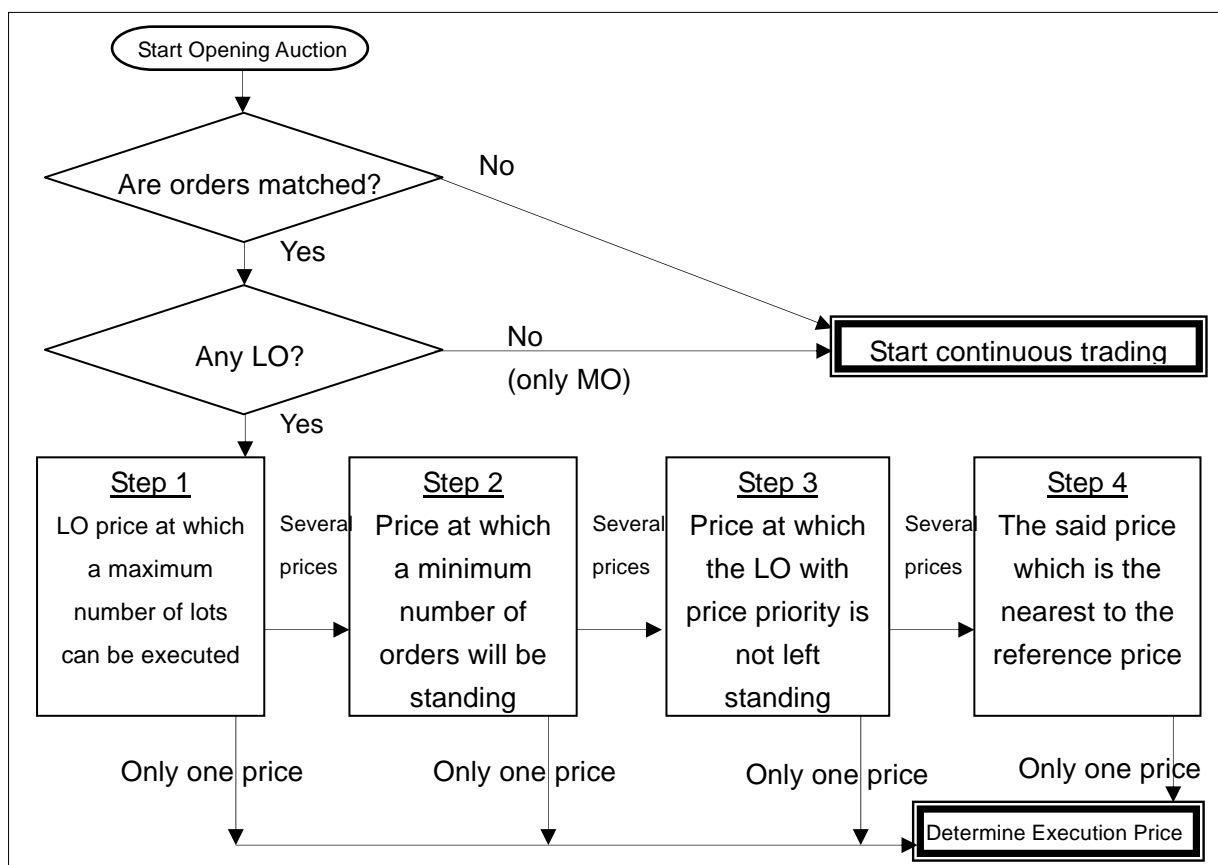
Step 1: the price at which a maximum number of lots can be executed, where there is a LO price.

Step 2: in addition to condition 1, when there is more than one price at which a maximum number of lots can be executed, the execution price is the price at which a minimum number of orders will remain.

Step 3: in addition to condition 2, when there is more than one price at which a minimum number of orders would be standing, the execution price is the price at which the LO with the most advantageous price is not left standing.

Step 4: if there is more than one price possible under condition 3, the execution price is the price nearest to the reference price within said prices (at the start of the night session, the reference price is the settlement price of the previous clearing period. At the start of the day session, the reference price is the last price of the night session; however, if no execution has taken place during the night session, the reference price will be the settlement price of the previous clearing period. For the first trading session of a new contract month or options series, since there isn't a previous clearing period, the reference price will be zero).

#### Execution Price Determination Flow in Opening Auction



**EXECUTION PRICE ILLUSTRATION (Opening Auction)**

("Agg.": aggregated number of lots)

Sell			Buy	
Lots	Agg.		Agg.	Lots
	40	103		
20	40	102	40	40
	20	101	50	10
20	20	100	50	
		99	60	10

**Execution Price Determined at Step 1**

Step 1: among the LO prices (JPY 102, JPY 101, JPY 100, JPY 99), a maximum number of lots can be executed at JPY 102.

Execution price = JPY 102

Sell			Buy	
Lots	Agg.		Agg.	Lots
	40	103	20	20
	40	102	20	
20	40	101	20	
	20	100	30	10
	20	99	30	
	20	98	20	

**Execution Price Determined at Step 2**

Step 1: among the LO prices (JPY 103, JPY 101, JPY 100), a maximum number of lots can be executed at either JPY 103, or JPY 101 or JPY 100.

Step 2: at JPY 103 and JPY 101, 20 lots would remain, but at JPY 100, a minimum of 10 lots would remain.

Execution price = JPY 100

Sell			Buy	
Lots	Agg.		Agg.	Lots
	20	103		
	20	102	30	30
	20	101	30	
	20	100	30	
20	20	99	30	
		98	30	

**Execution Price Determined at Step 3**

Step 1: among the LO prices (JPY 102, JPY 99), a maximum number of lots can be executed at either JPY 102 or JPY 99.

Step 2: at either JPY 102 or JPY 99, 10 lots would remain.

Step 3: at JPY 99, 10 lots would remain at the more advantageous price of JPY 102, but at JPY 102, no lots would remain at the advantageous price.

Execution price = JPY 102

Sell			Buy	
Lots	Agg.		Agg.	Lots
	30	103		
10	30	102	20	20
	20	101	20	
	20	100	20	
20	20	99	30	10
		98	30	

**Execution Price Determined at Step 4**

Step 1: among the LO prices (JPY 102, JPY 99), a maximum number of lots can be executed at either JPY 102 or JPY 99.

Step 2: at either JPY 102 or JPY 99, 10 lots would remain.

Step 3: neither at JPY 102 nor at JPY 99 would an advantageous price remain.

Step 4: the Reference Price is JPY 100.

Execution price = JPY 100

#### 4.2. Rules to Determine Execution Price in Continuous Trading (*Zaraba*)

In continuous trading, execution takes place immediately if there is a corresponding order on the other side of the market when a new order is placed (or when the market conditions of a Stop Order are met).

When orders are executed, the allocation of number of lots will take place based on price priority and time priority.

##### EXECUTION PRICE ILLUSTRATION (Continuous Trading)

(the number of lots shown corresponds to the aggregate)

Example: a buy LO at JPY 102 for 30 lots is placed as a FaS

Before placing order			After execution		
Sell		Buy	Sell		Buy
25	103		5	103	
20	102	—		102	10
15	101			101	10
10	100			100	10
5	99			99	10
	98	5		98	15
	97	10		97	20

Explanation:

5 lots each at JPY 99, JPY 100, JPY 101 and JPY 102 are executed (20 lots in total). Since the order validity is FaS, the remaining 10 lots are stored in the order book at JPY102.

Example: a buy LO at JPY 102 for 20 lots is placed as a FoK.

Before placing order			After execution		
Sell		Buy	Sell		Buy
25	103		5	103	
20	102	—		102	
15	101			101	
10	100			100	
5	99			99	
	98	5		98	5
	97	10		97	10

Explanation:

5 lots each at JPY 99, JPY 100, JPY 101 and JPY 102 are executed (20 lots in total). In this case, the execution result would be the same for all order validity (FoK, FaS or FaK).

## 5. Market Data Dissemination

### 5.1 Market Depth (Ten Best Bids and Offers)

The Exchange disseminates best bids and offers up to a market depth of ten. Information on the number of orders for each bid/offer will also be available.

From the start of order acceptance to the start of the opening auction, the aggregated number of orders at prices more advantageous than the expected execution price will be disseminated as the expected execution price (the expected execution price is calculated based on the flow chart on page 14). However, if there are only Market Orders (MO), the ten best bids/offers will not be disseminated.

#### TEN BEST BIDS/OFFERS ILLUSTRATION

(the number of sell/buy orders shown corresponds to the number of orders per price)

Example: if orders can possibly be matched during order acceptance, before the opening auction starts

Actual Orders		
Sell	Price	Buy
5	103	
	102	5
5	101	
5	100	10
5	99	
	98	5
5	97	



Bids/Offers Displayed		
Sell	Price	Buy
5	103	
	—	
5	101	
15	<u>100</u>	15
	—	
	98	5
	—	

#### Explanation:

Since JPY 100 is the expected execution price in opening auction, this will be the disseminated market depth 1, showing the aggregate number of buy/sell orders (15 each).

Note that the offer prices at JPY 99 and at JPY 97, and the bid price at JPY 102 will not be disseminated.

Example: if there are only MO before the opening auction starts

Actual Orders		
Sell	Price	Buy
5	MO	5



Bids/Offers Displayed		
Sell	Price	Buy
5	—	5

#### Explanation:

If there are only MO, the expected execution price will not be disseminated, but the number of bids/offers will.

Example: if continuous trading, or if no match possible for orders during order acceptance before the opening auction starts

Actual Orders		
Sell	Price	Buy
5	103	
	102	
10	101	
20	100	
	99	20
	98	10
	97	5



Bids/Offers Displayed		
Sell	Price	Buy
5	103	
	—	
10	101	
20	100	
	99	20
	98	10
	97	5

#### Explanation:

The offer prices at JPY 100, JPY 101 and JPY 103, and the bid prices at JPY 99, JPY 98 and JPY 97 will be disseminated.

Since there is no LO at JPY 102, the JPY 102 price data will not be disseminated.

Note: actual screen display differs from one Member's system to another.

## 5.2 Market Data Disclosure

The Exchange disseminates a variety of data (e.g: trading volume, open interest, delivery volume, exercised options volume etc.) including the data shown below.

Market Data	Method and Frequency (JST)
Volume by Contract Month per Product	Website / Daily (around 19:00)
Top 10 Volume by Member per Product (*1)	Website / Daily (around 19:00)
Final Settlement Volume per Product (*2)	Website / Final Settlement Day (around 19:00)
Open Interest by Contract Month per Product	Website / Daily (around 19:00)
Open Interest by Category (*3)	Website / Daily (around 19:00)
Concentration of Positions Held by Large Traders (*4)	Website / Once a month (data as of the 10th is to be published on the following third business day)
Exercised Volume by Series	Website / Daily (around 19:00)

\*1: Volume of each member by product in one clearing period (night session on T-1 + day session on T) will be calculated, and the volume and the name of top 10 members will be disclosed.

\*2: As for cash-settled futures transactions (Gold Mini, Platinum Mini and Crude Oil Contracts), the final settlement volume will be disclosed on the final settlement day.

\*3: **Open interest** by product will be calculated per the below categories.

7 Categories	7 Categories Details	2 Categories
1. Trade Member – Proprietary	Proprietary positions of Trade Members (Members who have direct access to the market and trade for their own account)	<b>I. Commercials Total:</b> Summing up categories 1, 3, 5 and 7
2. Broker Member – Proprietary	Proprietary positions of Broker Members (Members who have direct access to the market and are licensed by METI* to offer brokerage services)	
3. Commercials – Customer	Customer positions consigned by commercials (i.e: “a person who engages commercially in the Buying and Selling of Listed Commodity Component Products, including items that are the main ingredient or material of the Listed Commodity Component Product”)	
4. Non-commercials – Customer	Customer positions consigned by non-commercials	<b>II. Non-commercials Total:</b> Summing up categories 2, 4 and 6
5. Trade Member – Customer	Customer positions consigned by Trade Members (Members who have direct access to the market and trade for their own account) to a Broker Member	
6. Broker Member – Customer	Customer positions consigned by Broker Members (Members who have direct access to the market and are licensed by METI* to offer brokerage services) to another Broker Member	
7. Affiliate/ Associate Member – Customer	Customer positions consigned by Affiliate or Associate Members (Members who do not have direct access to the market and who must trade through a Broker Member) to a Broker Member	

\*METI: Ministry of Economy, Trade and Industry

\*4: On the 10th of every month (the business day before in case of a holiday) long and short positions per product will be aggregated and the Exchange will disclose the percentage of positions held by the top 5 traders, the top 10 traders, as well as all large traders. The data will be published on the third business day following the 10th of each month (e.g: for May 2009, data as of 5/8th will be published on 5/13th).

## 6. Circuit Breaker System

Circuit breaker (CB) is a functionality which suspends the execution of orders when the matching price would fall outside a trigger level set by the Exchange. When the CB is triggered, the trading session will be halted for a short period of time (during this time, new orders and order corrections/cancellations will still be accepted but not executed). Trading will then resume with an expanded CB trigger level.

The CB trigger level is to be set every day at the start of a clearing period (i.e: the start of a night session at 17:00) and is based on the settlement price of the previous clearing period (or the settlement price of the preceding contract month, in case of a new contract month). After the start of a session, including the opening auction, if there are corresponding orders at a price falling outside the CB trigger level (i.e: if the CB is “triggered”), said orders will not be immediately executed and the trading session for all contract months in that instrument will be halted. The CB trigger level will be expanded and the order acceptance period will start. Trading will then resume simultaneously in all contract months through an opening auction.

If the CB is triggered within the last 5 minutes of the day session or night session (i.e. after 15:25 or 22:55), the session will end at the closing time.

### Circuit Breaker Process

CB Trigger Timing	Process Following a CB Trigger
Opening Auction ( 9:00 and 17:00 )	(Regular Process) 1) Right after orders could possibly be matched outside the CB trigger level, the trading session for all contract months in that instrument are halted (see notes below). 2) Order acceptance period starts and the CB trigger level is automatically expanded. 3) After a certain period, trading will resume (opening auction for all contract months simultaneously). 4) Continuous trading will follow.
Continuous Trading	
Right before closing of day session	If the closing time comes before trading could resume, as described under regular process No. 3 above, the session will close.
Right before closing of night session	The expanded CB trigger level, as described under regular process No. 2 above, will still be effective in the day session. If the closing time comes before trading could resume, as described under regular process No. 3 above, the session will close.
Second CB trigger within the same clearing period	The regular process will apply (i.e: the CB trigger level will be automatically expanded for the second time).

Note 1. Examples of contract months (options series) affected by a CB trigger:

- CB trigger in one contract month of the Gold Standard contract: CB will be triggered in the other five contract months. CB will neither be triggered in the Gold Mini contract, nor in the Gold Options (call/put).
- CB trigger in one contract month of the Gold Mini contract: CB will be triggered in the other five contract months. CB will neither be triggered in the Gold Standard contract, nor in the Gold Options (call/put).
- CB trigger in one series of the Gold Call Options. CB will be triggered in all the other Gold Call Options series. CB will neither be triggered in the Gold Put Options, nor in the Gold futures (standard and mini).

Note 2. If a CB is triggered in a contract month during the opening auction, the sessions in the other contract months will also be halted. However, in some contract months, the sessions can be halted after execution at the opening auction takes place. For the contract month where the CB originated, there will be no opening auction, the session will be halted and orders will start to be accepted. The session halt period (order acceptance period) is 5 minutes. The CB trigger level per market will be regularly updated (please visit our website for the current CB trigger level: [www.tocom.or.jp](http://www.tocom.or.jp)).

## 7. Settlement Price

The settlement price of a clearing period for a regular business day and for the Last Trading Day is calculated in accordance with the below chart. The Exchange then notifies the Japan Commodity Clearing House (JCCH), and JCCH determines the settlement price. In the case where the settlement price can not be calculated, the Exchange calculates the price by taking into consideration various factors, including market conditions, and then notifies JCCH.

Type of Transaction		Regular Business Day	Last Trading Day
Physically Delivered Futures Transaction		VWAP(*1) on last "n" minutes of the day session	VWAP on day session (*2)
Cash-settled Futures Transaction	Crude Oil		Same as on regular business day(*3)
		Mini	Standard contract's settlement price
Options Transaction		Theoretical price	

\*1: VWAP stands for Volume Weighted Average Price.

\*2: VWAP on day session is based on all execution prices during the day session.

\*3: For Crude Oil, the Final Settlement Day is the business day following the Last Trading Day (i.e: the first business day of the month). The Final Settlement Price is Platt's monthly average price.