Outline of Specifications for Interest Rate Futures

As of May 29, 2023

Osaka Exchange, Inc.

Item	Details	Remarks
I. Outline of Trading		
1. Underlying Financial Indicator	- The underlying financial indicator shall be a financial indicator pertaining to three-month TONA (meaning a financial indicator calculated by subtracting the daily cumulative compounded Tokyo Overnight Average rate (TONA; an uncollateralized overnight call rate published by the Bank of Japan) for a three-month period from 100).	
2. Trading Sessions (1) Trading Sessions and Hours	- Morning session ➢ Opening auction: 8:45 a.m. ➢ Regular session: 8:45 a.m. - 11:00 a.m. ➢ Closing auction: 11:02 a.m. - Afternoon session ➢ Opening auction: 12:30 p.m. ➢ Regular session: 12:30 p.m. - 3:00 p.m. ➢ Closing auction: 3:02 p.m. - Night session ➢ Opening auction: 3:30 p.m. ➢ Regular session: 3:30 p.m. - 5:55 a.m. the next day ➢ Closing auction: 6:00 a.m. the next day	- Osaka Exchange Inc. (OSE) may temporarily change trading hours if necessary.
(2) Venue of Trading Sessions	- Trading shall be conducted through the trading system.	
3. Contracts and Number Thereof	- The interest rate observation period (interest rate reference period) shall be from the third Wednesday of March, June, September or December to the day before the third Wednesday three months after. Interest rate futures trading shall be conducted by dividing it into contracts whose last trading day is the trading day which ends on the business day before the third Wednesday of the month that includes the last day of the interest rate observation period. - Twenty contracts in the March quarterly cycle shall be available for trading. The trading period for each contract shall be five years. - Trading of a new contract shall start from the morning session of the trading day after the last trading day of the most recently expired contract.	- OSE may change the number, trading period, initial trading day, and last trading day of contracts when necessary. - For interest rate futures, a trading day is defined as one cycle from 3:25 p.m. to 3:15 p.m. the next business day.
4. Trading Method	- Interest rate futures shall be traded by individual auction.	

Item	Details	Remarks
5. Contract Units, Orders, and Price Limits (1) Contract Units	– One contract unit shall be the amount obtained by multiplying JPY 250,000 by the value of the underlying financial indicator.	
(2) Orders	– Trading participants may submit market orders and limit orders. - Orders (bids and offers) must be made with one of the conditions for validity period or execution volume listed below. a. Good for Day (GFD) A condition that causes orders made during a particular morning or afternoon session to expire at the end of said afternoon session, and those made during a particular night session to expire at the end of said night session. b. Good Till Date/Good Till Cancel (GTD/GTC) A condition under which orders are valid until the end of the afternoon session on the last day (or one business day earlier if the last day is a non-business day) of a period specified by the trading participant within a period separately specified by OSE (GTD) or until the order is cancelled (GTC). c. Fill and Kill (FAK) A condition which, if an entire order cannot be filled immediately, causes the amount that can be filled immediately to be filled, and the rest to be cancelled. d. Fill or Kill (FOK) A condition which, if an entire order cannot be filled immediately, causes it to be cancelled. – Validity of orders shall be in accordance with the above conditions.	- Conditions for validity period may not be specified for market orders. – A trading participant may not make orders with the Fill or Kill condition in the opening auction or the closing auction.
(3) Tick Size	– The tick size shall be 0.0025 points.	
(4) Price Limits	– Orders may not exceed the designated price fluctuation range. – The lower limit of the price fluctuation range shall be obtained by subtracting the price limit from the reference price, and the upper limit shall be obtained by adding the price limit to the reference price. – As a general rule, the reference price shall be the settlement price of the same contract on the previous trading day. However, the reference price on the contract's initial trading day shall be the settlement price of the contract that expires immediately before the new contract is set to expire, taken on the trading day before the initial trading day of the new contract. – The price limits shall be 0.25 points. – For details on the expansion of upper or lower price limits	– The settlement price of an interest rate future is the price specified by Japan Securities Clearing Corporation (JSCC) as said interest rate future's settlement price; the same shall apply hereinafter.

<table>
<tr><th>Item</th><th>Details</th><th>Remarks</th></tr>
<tr><td></td><td>on orders due to the triggering of a circuit breaker and other related matters, please refer to the "Static Circuit Breaker Rules" document.

– OSE may change the price limits on orders if necessary.</td><td></td></tr>
<tr><td>6. Temporary Trading Halts
(1) Static Circuit Breaker</td><td>– As a general rule, OSE will temporarily halt trading (including strategy trading and J-NET trading) when the price of an interest rate futures lead contract rises or falls significantly (this is hereinafter referred to as the "Static Circuit Breaker").

– When the Static Circuit Breaker is triggered, the upper or lower price limits of interest rate futures whose underlying financial indicator is the same as that of said lead contract will be expanded as specified by OSE.

– For details on other related matters, please refer to the "Static Circuit Breaker Rules" document.</td><td>– The "lead contract" shall be the second contract.</td></tr>
<tr><td>(2) Immediately Executable Price Range (Dynamic Circuit Breaker)</td><td>– When a trade for an interest rate futures contract is to be executed outside the designated price fluctuation range around a designated reference price, OSE shall temporarily halt trading (including strategy trading) for said contract for an appropriate period. (This is called the Dynamic Circuit Breaker (DCB), and the designated reference price is called the "DCB Reference Price.")

– The DCB Reference Price shall be the mid-price of the last best bid and best offer (including the last traded price).

– The designated price fluctuation range (hereinafter referred to as the "DCB Price Range") shall be as follows.
<table>
<tr><th colspan="2">DCB Price Range</th></tr>
<tr><td>Opening Auction</td><td>±0.075 points</td></tr>
<tr><td>Regular Session</td><td>±0.025 points</td></tr>
<tr><td>Closing Auction</td><td>±0.05 points</td></tr>
</table></td><td>– The "appropriate period " shall be 30 seconds, as a general rule.
– When OSE deems it appropriate in light of the trading status, the DCB Reference Price shall be a price specified by OSE on a case-by-case basis.</td></tr>
<tr><td>7. Final Settlement</td><td>– When offsetting purchases or sales are not executed by the last trading day, the remaining positions shall be settled at the final settlement price on the business day after the final settlement price is determined (this business day shall be referred to as the "final settlement day" hereinafter).

– The final settlement price shall be determined on the business day after the last trading day and shall be calculated according to the following formula.</td><td>– Please refer to the "Contingency Plan for Special Quotations and Final Settlement Prices for Futures and Options" document.</td></tr>
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<table>
<tr><th>Item</th><th>Details</th><th>Remarks</th></tr>
<tr><td></td><td>Final Settlement Price =100−R
$R=\left\{\prod_{i=1}^{M}\left(1+TONA_i\times\frac{D_i}{365}\right)-1\right\}\times\frac{365}{a}$

− However, if the first day of the interest rate observation period is a bank non-business day, the formula is as follows:

$R=\left\{\left(1+TONA_0\times\frac{D_0}{365}\right)\prod_{i=1}^{M}\left(1+TONA_i\times\frac{D_i}{365}\right)-1\right\}\times\frac{365}{a}$

− The meaning of each symbol in the above formulas is as follows.
<table>
<tr><td>R</td><td>Daily cumulative compounded TONA (interest rate annualized and expressed as a percentage) in the interest rate observation period for the relevant contract</td></tr>
<tr><td>i</td><td>Integer indicating, of all the bank business days in the interest rate observation period for the relevant contract, the number of the relevant bank business day</td></tr>
<tr><td>M</td><td>Total number of bank business days in the interest rate observation period for the relevant contract</td></tr>
<tr><td>$TONA_i$</td><td>Confirmed TONA value as of the "i"th bank business day</td></tr>
<tr><td>D_i</td><td>Number of calendar days to which $TONA_i$ applies in the interest rate observation period for the relevant contract</td></tr>
<tr><td>a</td><td>Total number of calendar days in the interest rate observation period for the relevant contract</td></tr>
<tr><td>$TONA_0$</td><td>Confirmed TONA value as of the bank business day prior to the first business day of the interest rate observation period</td></tr>
<tr><td>D_0</td><td>Number of consecutive bank non-business days counting from the first day of the interest rate observation period</td></tr>
</table></td><td>− For calculation of the final settlement price, the value of "R" shall be rounded to four decimal places.</td></tr>
<tr><td>8. Restrictions on Trading</td><td>- When OSE deems that trading conditions are or are likely to become abnormal, it may implement the following measures against trading or accepting orders from customers.
a. Reducing price limits
b. Moving up the date and time for posting margin
c. Increasing the margin amount
d. Restricting the use of securities as margin
e. Lowering the assessment rate of collateral securities
f. Restricting or prohibiting interest rate futures trading (e.g., prohibiting proprietary trading)
g. Position limits</td><td></td></tr>
<tr><td>II. Strategy Trading</td><td>− For details, please refer to the "Outline of Strategy Trading Rules" document.</td><td></td></tr>
<tr><td>III. J-NET Trading</td><td>− For details, please refer to the "Outline of J-NET Trading Rules" document.</td><td></td></tr>
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Item	Details	Remarks
IV. Give-Ups	– For details, please refer to the "Outline of Give-Up Rules" document.	
V. Position Transfer	– Trading participants may transfer unsettled positions in their proprietary and their customer accounts to other trading participants. – Positions in contracts that have reached their last trading day may not be transferred after said last trading day. – Positions in interest rate futures shall be transferred by using the settlement price of each contract on the trading day before the day of the transfer as the contract price of the unsettled positions.	– JSCC shall specify the particulars pertaining to position transfers by clearing participants (which are entities that are qualified to be counterparties in JSCC's Financial Instruments Obligation Assumption Business (such qualification is hereinafter referred to as a "clearing qualification"; the same shall apply hereinafter).
VI. Margin and Settlement	– For details, please refer to the "Outline of Margin and Settlement Rules for Futures and Options" document.	
VII. Trading Participant Fees	– For details, please refer to the "Overview of Trading Participant Fees" document.	
VIII. Other 1. Information Distributed by the Market Information System	– The following information shall be distributed by the Market Information System. a. Opening/High/Low/Closing (O/H/L/C) prices and tick data b. Trading volume and value of each contract c. Total trading volume and value d. Unsettled positions (open interest) of each contract e. Total open interest e. Best quote prices and sizes f. Multiple quote prices and sizes g. Settlement prices h. Final settlement prices i. VWAP j. Number of executions – The Market Information System distributes the information on O/H/L/C prices and trading volume separately for the day and night sessions.	– When OSE notifies, discloses, and reports the O/H/L/C prices and trading volume for each issue pursuant to Article 130 and Article 131 of the Financial Instruments and Exchange Act (the "Osaka Exchange Daily Report"), it shall do so on a trading day basis.
2. Disclosure on Trading by Type of Investor	– OSE shall disclose the weekly and monthly trading volume and value of sales and purchases by type of investor.	
Supplementary Provisions	– These specifications are subject to change depending on market conditions.	