

*Underlined are updates from “Conversion of LIBOR Referencing IRS to Standard OIS” on our website on March 26, 2021

Conversion of LIBOR Referencing IRS to Standard OIS

October 8, 2021

Japan Securities Clearing Corporation

Item	Description	Remarks
1. Outline (1). Conversion	<ul style="list-style-type: none"> • Convert JSCC Cleared Contracts whose Floating Rate Option is JPY-LIBOR to those referencing TONA(OIS) with spread. 	<ul style="list-style-type: none"> • All Cleared Contracts, including Client trades, whose Floating Rate Option is JPY-LIBOR will be subject to the conversion. <u>However, LIBOR-referencing trades for which LIBOR-referencing leg in the last Calculation Period is to be fixed with LIBOR on or before December 31,2021 will be out of scope of conversion.</u> • To be converted to standard TONA(OIS) trades, with compounding (fixing in arrears) and Delayed Payment (2 days). • <u>See 2. (5) for the spread calculation method.</u> • There will be no compounding of the spread itself for each rate calculation period. • None of Lookback method, Lockout method or Observation Period Shift method, introduced to

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<p>(2). Conversion Timing</p>	<ul style="list-style-type: none"> ▪ <u>LIBOR referencing Cleared Contracts existing as of the close of business on December 3, 2021 (Fri.) will be converted to TONA(OIS) referencing trades.</u> 	<p>ISDA Definitions as new convention will apply to the converted trades.</p> <ul style="list-style-type: none"> ▪ See Annex1 for illustration of OIS conversion. ▪ <u>Actual conversion operation will be performed during the weekend (Dec. 4 – 5).</u>
<p>(3). Handling of Present Value Variation Associated with Conversion</p>	<ul style="list-style-type: none"> ▪ To cover NPV variation associated with the conversion, the amount equivalent to present value variation will be settled. ▪ The amount equal to the variation will be added to Variation Margin (VM) and other cash settlement amount and paid/received in cash at 11:00 a.m. on the 2nd business day following the Conversion Base Date. 	<ul style="list-style-type: none"> ▪ <u>NPV fluctuation amount is the difference between “the NPV of the LIBOR transaction to be converted, assuming that the transaction is treated as a fallback” and “the NPV of the OIS transaction after conversion based on the measure in 1.(1) (including short-term LIBOR-OIS basis swaps as described in 2.(1) Notes)”.</u> ▪ <u>As a method for confirmation of the present value variation equivalent, JSCC will provide a report (such as Fee Trade report) on the next business day following the Conversion Base Date.</u>

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		<ul style="list-style-type: none"> See <u>Annex2 for handling of compensation for NPV fluctuation amount at OIS one-time conversion.</u>
<p>2. Details of Conversion Method</p> <p>(1). Handling of Conversion</p>	<ul style="list-style-type: none"> <u>Underlying index of the Cleared Contracts containing LIBOR referencing leg will be changed from LIBOR to the standard OIS.</u> 	<ul style="list-style-type: none"> <u>Under the rules, the process is as described on the left. However, system-wise, Cleared Contracts containing LIBOR referencing leg will be terminated and new Cleared Contracts replacing LIBOR with standard OIS will come into existence.</u> <u>For the interest calculation period of the LIBOR referencing leg that is fixed by LIBOR on or before December 31,2021, in order to effectively retain the result of the LIBOR Fixing (refer to 2.(4)), an additional short-term LIBOR-OIS basis swap with a maturity date at the end of the calculation period will be generated, which offsets the OIS interest payment of the converted OIS transaction.</u>

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(2). Roll Date / Coupon Calculation Period	<ul style="list-style-type: none"> Keep the same terms as Cleared Contracts before conversion. 	<ul style="list-style-type: none"> <u>New CCP ID will be assigned.</u> To keep consistency of coupon calculation period, OIS trades whose Business Convention of Effective Date is None will be eligible for clearing.
(3). Payment Date	<ul style="list-style-type: none"> Change original Payment Date on LIBOR leg of the subject trades so that Payment Date will be 2 business days after calculation period end date (Delayed Payment.) 	<ul style="list-style-type: none"> Payment Date of non-LIBOR leg will remain unchanged.
(4). Handling of <u>LIBOR Fixing</u>	<ul style="list-style-type: none"> <u>In LIBOR referencing leg, for interest rate calculation period that is fixed by LIBOR on or before December 31,2021, the results of the LIBOR fixing will be retained in converted OIS referencing transaction. (for details, refer to 2.(1) Remarks).</u> 	
(5). <u>Spread Calculation Method</u>	<ul style="list-style-type: none"> <u>As the spread to be added to OIS leg after the OIS Conversion, the value prescribed as</u> 	<ul style="list-style-type: none"> <u>The spreads by Floating Rate Option and Designated Maturity are as follows (unit: %,</u>

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	<p><u>“Spread Adjustment” in the ISDA Fallback provisions (the value fixed on March 5, 2021) for each Floating Rate Option and Designated Maturity, adjusted to change the day count basis from 360-day basis to 365-day basis and rounded the resultant value to the nearest 3 decimal places in basis points, will be used.</u></p>	<p><u>before day count basis adjustment to 365-day basis):</u></p> <ul style="list-style-type: none"> ➤ <u>JPY LIBOR 6M : 0.05809</u> ➤ <u>JPY LIBOR 3M : 0.00835</u> ➤ <u>JPY LIBOR 1M : -0.02923</u> <ul style="list-style-type: none"> ▪ <u>As to the spread for a stub period, regardless of the Designated Maturity that has been designated for the stub period before OIS Conversion, the same spread as the Designated Maturity for the ordinary calculation period of the relevant trade shall apply.</u> ▪ <u>For Cleared Contracts of which LIBOR leg before OIS Conversion contains a spread, the final spread to be applied to such leg shall be the sum of the original spread after adjustment to change the day count basis from 360-day basis to 365-day basis and rounding to 3 decimal places in basis points, and the spread to apply at the time of OIS Conversion (i.e., the spread after adjustment to change day count basis from 360-day basis to 365-day basis and rounding to 3</u>

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<p>(6). Handling of Fees</p> <p>3. Other</p> <p>(1). Handling of LIBOR Referencing Basis Swaps, etc.</p>	<ul style="list-style-type: none"> ▪ If there is a fee payable upon maturity under a trade subject to conversion, such fee will be transferred to the converted trade. ▪ In case of LIBOR curve basis swaps (e.g., LIBOR vs ZTIBOR), LIBOR leg is converted to TONA (OIS) referencing leg. ▪ In case of LIBOR tenor basis swaps (e.g., LIBOR6M vs LIBOR3M) and LIBOR vs OIS basis swaps, they will be converted to OIS vs OIS basis swaps. 	<p><u>decimal places in basis points).</u></p> <ul style="list-style-type: none"> ▪ OIS vs ZTIBOR and OIS vs DTIBOR basis swaps will become eligible for clearing. ▪ OIS vs OIS basis swaps <u>will become</u> eligible trades for clearing. ▪ Spreads existed before conversion will be changed in association with OIS conversion. Moreover, in case of LIBOR tenor basis swaps and LIBOR vs OIS basis swaps, (because, in case of LIBOR vs OIS basis swaps, spread is generally added on OIS leg) we assume that spreads will exist on both legs as a result of OIS conversion. ▪ In addition, amortizing OIS and OIS with stub

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(2). Handling of LIBOR Trades	<ul style="list-style-type: none"> Will become ineligible for clearing on and after the next business day following Conversion Base Date. 	<p>will also be eligible for clearing.</p> <ul style="list-style-type: none"> IRS with Floating Rate Option of Fallback Rate (TONA) defined by ISDA will be ineligible for clearing. <u>Up to Dec. 30, 2021, JSCC clears swaps coming into existence as a result of swaption exercise (limited to IRS whose Floating Rate Option is JPY-LIBOR-BBA) as eligible trades for clearing. Then, JSCC will convert LIBOR referencing Cleared Contracts existing as of the end of business on Dec. 30 (Thurs.) into TONA(OIS). Conversion method is the same as the method described in 1. (1), (3) and 2. (1) to (6). Actual conversion operation will be performed during the period from Jan. 2 (Sun.) to Jan. 3 (Mon.), 2022.</u> <u>For certain period of time after Jan. 4, 2022 (Tue.), any swap coming into existence as a result of swaption exercise (referring to IRS whose Floating Rate Option is Fallback Rate</u>

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(3). Fee	<ul style="list-style-type: none"> · <u>Fee shall be as follows:</u> ➤ <u>Residual LIBOR Special Fee</u> <u>Monthly fee of JPY500/ LIBOR referencing Cleared Contract remaining as of the end of Oct. and Nov. 2021.</u> ➤ <u>Conversion Fee</u> <u>JPY3,500 per LIBOR referencing Cleared Contracts Cleared Contract subject to OIS Conversion.</u> 	<p><u>(TONA) defined by ISDA) will be converted into TONA(OIS) using the method described in 1. (1), 2. (1) to (3) and (5), (6) at each time such swap is submitted to JSCC Clearing System, and then converted TONA(OIS) will be cleared. (Upon conversion, there will be neither generation of LIBOR-OIS basis swap (2.(1) Remarks and (4)) nor settlement of cash related to the amount equivalent to the present value variation associated with the conversion (1.(3)).)</u></p> <ul style="list-style-type: none"> · <u>For example, the total cost for one LIBOR Cleared Contract that existed before the end of Oct. 2021 and was subject to OIS Conversion on Dec. 3 2021 would be JPY4,500 (= JPY500 + JPY500 + JPY3,500).</u> · <u>Residual LIBOR Special Fee shall be set for Clearing Members and Affiliates. Conversion Fee shall be set for Clearing Members, Affiliates and Clients.</u> · <u>Conversion Fee is the fee for OIS conversions to</u>

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		<u>be implemented as of Dec. 3, 2021 and as of Dec. 30, 2021 (see 1.(2) and 3.(2) Remarks) and OIS conversions to be implemented on and after Jan. 4, 2021 (see 3.(2) Remarks).</u>

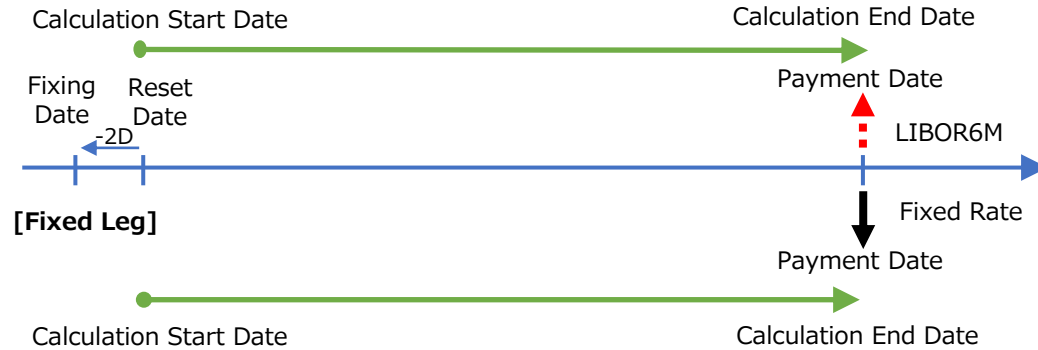
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Examples of Conversion of LIBOR Trade to TONA-OIS

1. LIBOR vs Fixed to OIS vs Fixed

【Before Conversion】 LIBOR6M vs Fixed

[LIBOR6M]

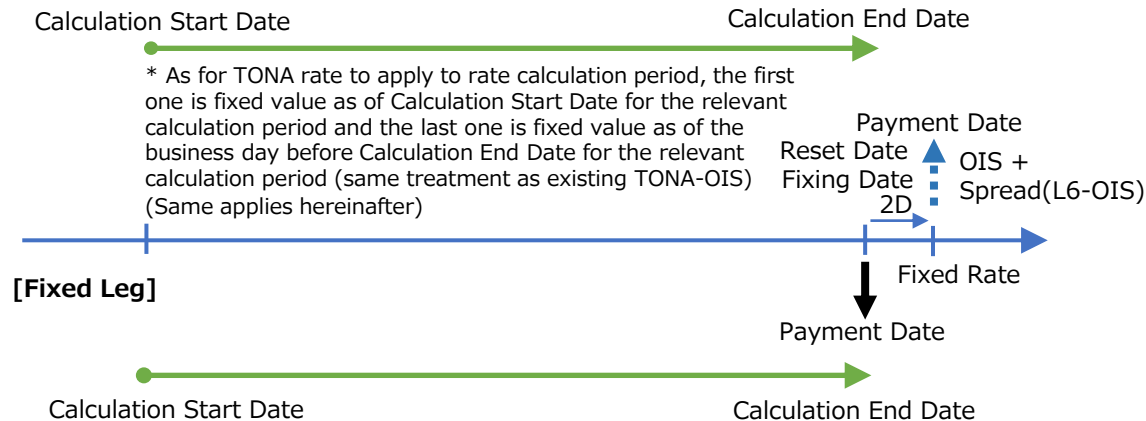


	LIBOR6M	Fixed
Rate	JPY-LIBOR-BBA	X%
Spread	-	-
Payment Frequency	SA	SA
Day Count Fraction	Act/360	Act/365
Payment Date Business Centers	JPTO, (GBLO)	JPTO, (GBLO)
Fixing Date Business Centers	GBLO, (JPTO)	-
Payment Offset Lag	0D	0D

* Items in brackets are optional

【After Conversion】 OIS + Spread(L6-OIS) vs Fixed

[OIS Leg]



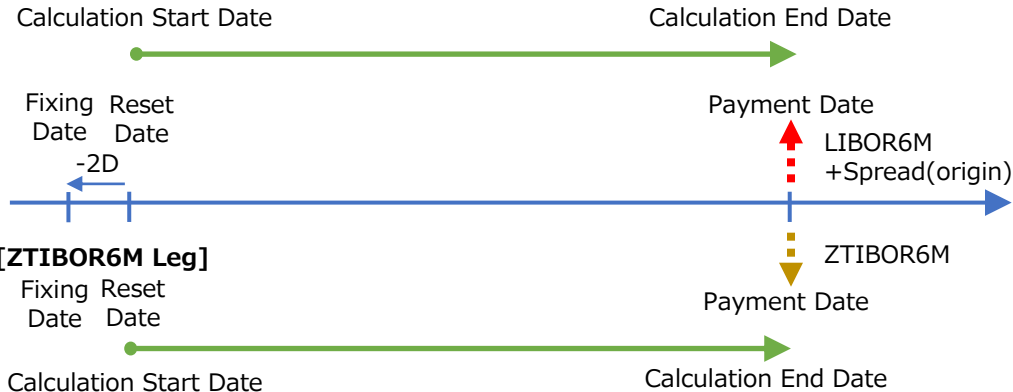
	OIS	Fixed
Rate	JPY-TONA-OIS-COMPOUND	X%
Spread	Spread(L6-OIS)	-
Payment Frequency	SA	SA
Day Count Fraction	Act/365	Act/365
Payment Date Business Centers	JPTO, (GBLO)	JPTO, (GBLO)
Fixing Date Business Centers	JPTO	-
Payment Offset Lag	2D	0D

* Items with economic term change associated with OIS conversion are shown in **bold/underline**

2. LIBOR vs TIBOR to OIS vs TIBOR

[Before Conversion] LIBOR6M + Spread(origin) vs ZTIBOR6M

[LIBOR6M Leg]



[ZTIBOR6M Leg]



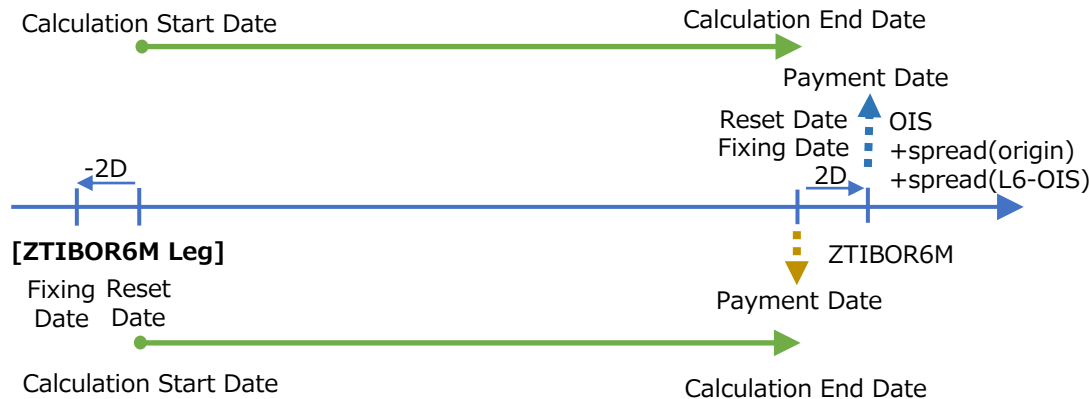
(Legend)	LIBOR6M Settlement	ZTIBOR6M Settlement	OIS Settlement
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	LIBOR6M	ZTIBOR6M
Rate	JPY-LIBOR-BBA	JPY-TIBOR-ZTIBOR
Spread	Spread(origin)	-
Payment Frequency	SA	SA
Day Count Fraction	Act/360	Act/360
Payment Date Business Centers	JPTO, (GBLO)	JPTO, (GBLO)
Fixing Date Business Centers	GBLO, (JPTO)	JPTO, (GBLO)
Payment Offset Lag	0D	0D

* Items in brackets are optional

[After Conversion] OIS + Spread(origin) + Spread(L6-OIS) vs ZTIBOR6M

[OIS Leg]



[ZTIBOR6M Leg]



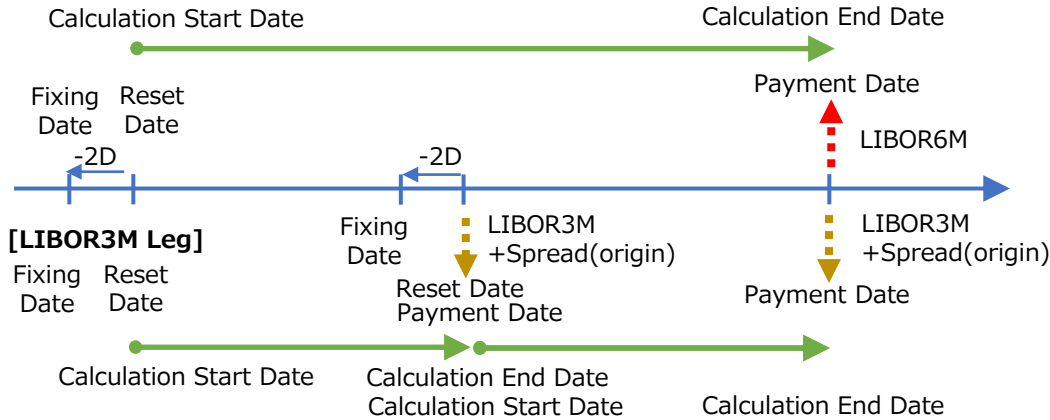
	OIS	ZTIBOR6M
Rate	JPY-TONA-OIS-COMPOUND	JPY-TIBOR-ZTIBOR
Spread	Spread(origin) + Spread(L6-OIS)	-
Payment Frequency	SA	SA
Day Count Fraction	Act/365	Act/360
Payment Date Business Centers	JPTO, (GBLO)	JPTO, (GBLO)
Fixing Date Business Centers	JPTO	JPTO, (GBLO)
Payment Offset Lag	2D	0D

* Items with economic term change associated with OIS conversion are shown in **bold/underline**

3. LIBOR vs LIBOR to OIS vs OIS

【Before Conversion】 LIBOR6M vs LIBOR3M + Spread(origin)

【LIBOR6M Leg】



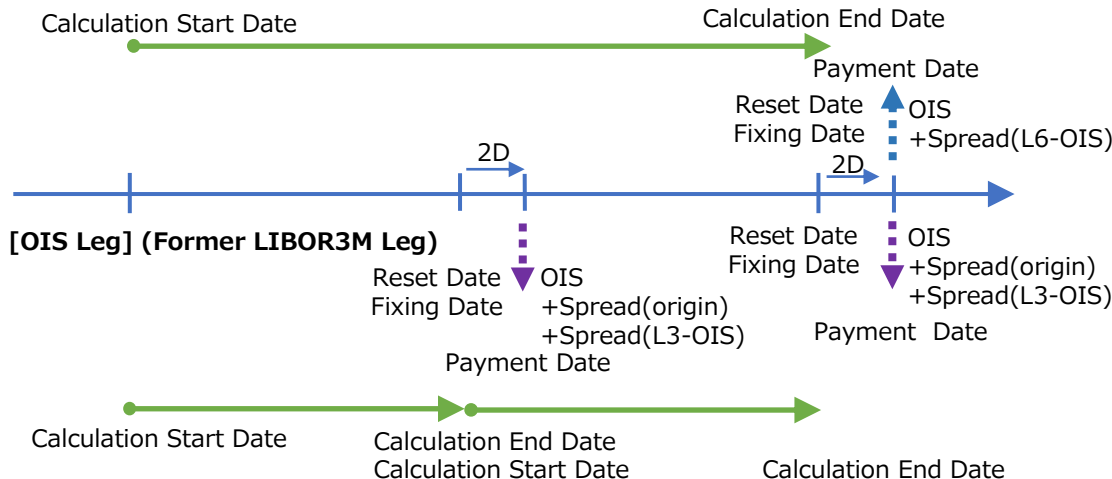
(Legend)	▲ LIBOR6M	▲ LIBOR3M	▲ OIS (6M)	▲ OIS (3M)
	⋮ Settlement	⋮ Settlement	⋮ Settlement	⋮ Settlement

	LIBOR6M	LIBOR3M
Rate	JPY-LIBOR-BBA	JPY-LIBOR-BBA
Spread	-	Spread(origin)
Payment Frequency	SA	QTR
Day Count Fraction	Act/360	Act/360
Payment Date Business Centers	JPTO, (GBLO)	JPTO, (GBLO)
Fixing Date Business Centers	GBLO	GBLO
Payment Offset Lag	0D	0D

* Items in brackets are optional

【After Conversion】 OIS + Spread(L6-OIS) vs OIS + Spread(origin) + Spread(L3-OIS)

【OIS Leg】 (Former LIBOR6M Leg)



	OIS	OIS
Rate	JPY-TONA-OIS-COMPOUND	JPY-TONA-OIS-COMPOUND
Spread	Spread(L6-OIS)	Spread(origin) + Spread(L3-OIS)
Payment Frequency	SA	QTR
Day Count Fraction	Act/365	Act/365
Payment Date Business Centers	JPTO, (GBLO)	JPTO, (GBLO)
Fixing Date Business Centers	JPTO	JPTO
Payment Offset Lag	2D	2D

* Items with economic term change associated with OIS conversion are shown in **bold/underline**

- For Cleared Contracts as of business closing of conversion base date(D), the equivalent amount of compensation (15) would be the difference between “NPV of Fallback LIBOR (85)” and “post-conversion NPV (60+10)”. This amount will be paid/received on the second following Business Day (D+2) as NPV fluctuation equivalent amount <Red box area>

	D-1	D (Conversion base date)	Migration procedures	D+1	D+2
Pre-conversion Original NPV (Original LIBOR Trade)	150	100			
Fallback LIBOR NPV		85			
Converted NPV (Converted OIS Trade)		60		70	
Converted NPV (Libor Preservation Trade)		10		10	
NPV fluctuation equivalent amount (Cash Compensation amount)					15 (Participant Rec.) (= 85-(60+10))
VM				-50 (Participant Pay) (= 100-150)	-20 (Participant Pay) (= (70 +10) - 100)
VM, etc. (Netted paid/received amount)					Participant -5 (Pay) (= 15-20)