

# **Overnight Index Swap (OIS)**

This Product Disclosure Statement is in reference to RBI Circular dated 16.09.2021, Master Direction – Reserve Bank of India (Market-makers in OTC Derivatives) Directions, 2021.

This document contains standard information about the product which may enable the user to determine if the product will meet its hedging needs and to facilitate comparison with other products.

#### **Features**

This derivative product is an instrument to convert the Overnight MIBOR to fixed rate and vice versa. Here, user pays the fixed rate/ Overnight MIBOR rate and receives the floating Overnight MIBOR/fixed rate. Taken together with the underlying loan/asset, this effectively converts user's floating/fixed rate liability/asset into a fixed/floating rate liability/asset. Such exchange of cashflows are known as an Overnight Index Swap (OIS).

In other words, the underlying can be a liability or an asset. The user can convert the floating cashflows into fixed rate cashflows or vice versa.

Underlying	Possible trades	OIS Pay/Receive	
Liability	Floating to Fixed Swap	User Pays Fixed Rate and Receives Floating Rate	
	Fixed to Floating Swap	User Receives Fixed Rate and Pays Floating Rate	
Asset	Floating to Fixed Swap	User Receives Fixed Rate and Pays Floating Rate	
	Fixed to Floating Swap	User Pays Fixed Rate and Receives Floating Rate	

#### Illustration:

For a liability in INR where user converts floating rate liability into fixed rate liability

The underlying exposure for this transaction is an INR liability where user has floating interest rate payments linked to overnight MIBOR. User is thus exposed to the risk of increasing overnight MIBOR resulting in higher INR cost. Here, user has hedged this risk by converting the floating overnight MIBOR rate to a fixed rate for the residual tenor and notional of the underlying exposure.

## **Building Blocks:**

The building blocks of this option are as below:

a. OIS Curve

### Costs and fees, including break-up and details

The swap cost consists of market cost which is determined through Bid/Offer spread of building blocks, tenure of the swap, notional and amortization schedule, administrative costs, Capital charge and transaction handling charges.

## An illustration of how the product works

User's underlying exposure: Overnight MIBOR

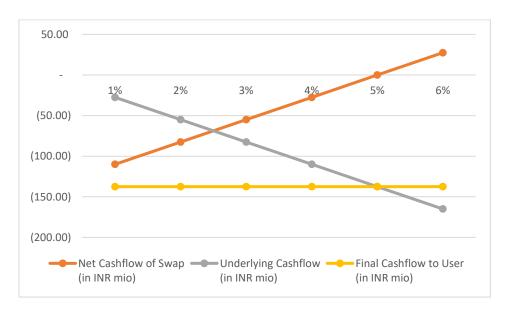
User pays after swap: 5.00 %

Coupon settlement frequency: Semi-Annually Amortization: As per schedule given below

Start Date	End Date	Applicable INR Notional	INR Amortization on End date	INR Fixed Coupon after OIS
6-Sep-21	7-Mar-22	1,000,000,000.00	100,000,000.00	24,931,506.85
7-Mar-22	6-Sep-22	900,000,000.00	100,000,000.00	22,561,643.84
6-Sep-22	6-Mar-23	800,000,000.00	100,000,000.00	19,835,616.44
6-Mar-23	6-Sep-23	700,000,000.00	100,000,000.00	17,643,835.62
6-Sep-23	6-Mar-24	600,000,000.00	100,000,000.00	14,958,904.11
6-Mar-24	6-Sep-24	500,000,000.00	100,000,000.00	12,602,739.73
6-Sep-24	6-Mar-25	400,000,000.00	100,000,000.00	10,055,555.56
6-Mar-25	6-Sep-25	300,000,000.00	100,000,000.00	7,666,666.67
6-Sep-25	6-Mar-26	200,000,000.00	100,000,000.00	5,027,777.78
6-Mar-26	6-Sep-26	100,000,000.00	100,000,000.00	2,555,555.56

By entering into this product, the user pays a fixed rate of 2% p.a. and mitigates the interest rate risk arising out of floating rate benchmark. On each swap settlement date, the user receives/pays net differences between fixed rate and compounded floating rate for the applicable tenor.

# Pay-off profile:



## **Impact Analysis (in INR mn)**

Average Floating Leg rate	Net Cashflow of Swap (in INR mio)	Underlying Cashflow (in INR mio)	Final Cashflow to User (in INR mio)
1%	(109.99)	(27.50)	(137.49)
2%	(82.50)	(55.00)	(137.49)
3%	(55.00)	(82.50)	(137.49)
4%	(27.50)	(109.99)	(137.49)
5%	-	(137.49)	(137.49)
6%	27.50	(164.99)	(137.49)

Note: In the above table, negative sign indicates cash outflow. Here, we can see that irrespective of overnight MIBOR rate throughout the tenor of the swap, total payable by user is constant

#### **Benefits**

This product allows users to switch between floating rate and fixed rate liability/asset and actively manage interest rate risk.

### **Risks**

- (1) Interest rate not moving as anticipated by the user
- (2) Basis risk
- (3) Liquidity risk
- (4) Bid-offer spreads in case of unwind

The terms and conditions applicable for booking/termination will be guided by deal term sheet/sanction letter/ISDA document