SEK Interest Rate Swaps

NASDAQ provides central counterparty clearing in SEK denominated interest rate swaps (SEK IRS).

Facts about SEK IRS

<table>
<thead>
<tr>
<th>Contract type</th>
<th>Interest Rate Swap denominated in Swedish Krona with daily shifting of variation margin</th>
</tr>
</thead>
<tbody>
<tr>
<td>Notional amount</td>
<td>Minimum SEK 1,000,000 and a maximum of SEK 10,000,000,000. Decimals are not allowed.</td>
</tr>
<tr>
<td>Swap period</td>
<td>The period between start day and end day. Determined by the parties but shall be a maximum of thirty years</td>
</tr>
<tr>
<td>Buyer</td>
<td>Buyer pays fixed rate and receives floating rate</td>
</tr>
<tr>
<td>Seller</td>
<td>Seller receives fixed rate and pays floating rate</td>
</tr>
<tr>
<td>Fixed Interest Rate</td>
<td>Rate is expressed as % with maximum four decimals places and is determined by the parties</td>
</tr>
<tr>
<td>Floating Interest Rate</td>
<td>3 months STIBOR™, expressed as % with maximum three decimal places. The parties may determine a positive or negative margin expressed as interest rate basis points. For the first floating interest rate period the parties may determine another applicable floating interest rate</td>
</tr>
<tr>
<td>Fixed interest rate amount</td>
<td>Fixed interest rate amount = Notional amount * Fixed Rate * Fixed Rate day count fraction</td>
</tr>
<tr>
<td>Floating interest rate amount</td>
<td>Floating interest rate amount = Notional amount * Float rate * Float rate day count fraction</td>
</tr>
<tr>
<td>Shifting of variation margin</td>
<td>SEK IRS will have a daily shift of the variation margin between the buyer and the seller. Variation margin will be interest compensated with the T/N STIBOR™ rate</td>
</tr>
<tr>
<td>Series Designation</td>
<td>“SEK_IRS”</td>
</tr>
<tr>
<td>Listing</td>
<td>Clearing Listing</td>
</tr>
</tbody>
</table>

Market model

Transactions in interest rate swaps are either entered into on a bilateral basis or concluded on a trading venue and then submitted to Nasdaq Clearing for central counterparty clearing. Members wishing to clear SEK interest rate swaps need to have entered into a Default Management Commitment and have posted their Loss Sharing contribution to the Loss Sharing Pool as stipulated in the Loss Sharing Rules.

Clients can choose between a number of models for clearing with different options for segregation and portability. For more details on our clearing model and account structure please click here

Fixed leg

The rate shall be expressed as a yearly % with maximum 4 decimal places. The payment frequency of the fixed leg is 3, 6 or 12 months, which is negotiated by the parties. If the fixed period is not a regular period it is considered a stub period. Stub periods can occur as the first cash flow (“front stub”) or the last cash flow (“back stub”). The stub period can never be longer than two regular periods.
Supported day count conventions are:
30/360
EU30/360
ACT/360

Supported business day conventions are:
MODIFIED FOLLOWING
NONE

Floating leg
A regular floating leg period will be fixed against 3 months STIBOR™. The parties can agree upon a spread to the floating rate, the spread shall be expressed in basis points. If the floating period is not a regular period it is a stub period. Stub periods can occur as the first cash flow (“front stub”) or the last cash flow (“back stub”). However, the stub period can never be longer than two regular periods.

Supported day count conventions are:
ACT/360

Supported business day conventions are:
MODIFIED FOLLOWING

Trade registration
Trade registration of SEK IRS can take place in MarkitWire, Clearing Workstation 1 and via OMnet API. MarkitWire is an external affirmation platform used by most market participants in the swap market. NASDAQ has integrated to MarkitWire via a proprietary gateway, i.e. that all SEK IRS trades registered in MarkitWire with clearing at NASDAQ will be sent via the gateway to our clearing system, Genium INET. All trades will be subject to a pre-novation check and if both buyer and seller have sufficient collateral the trade will be novated. A novation broadcast will be sent to the buyer, seller and to MarkitWire in order to reflect the correct status of the trade.
Clearing Workstation is a back office application offered to all NASDAQ clearing members. The application is used for trade registrations, trade allocations, position handling and clearing report administrations etc. For more details on trade registration of SEK IRS in Clearing Workstation, see the Clearing Workstation User's Guide.

OMnet API is NASDAQ's proprietary API that clearing members can integrate with. Detailed information about OMnet API is available in Protocol specifications.

**Risk Model**

Interest rate swaps use the Cash Flow Margin (CFM) as risk model. CFM is a yield curve based risk model where the yield curves is used to determine the future cash flows and calculate the present value of the fixed and floating leg. The approach towards risk is based on Principal Component Analysis (PCA) where the first three principal components are used for stressing the curve. More information about the CFM model is available here.

**Upfront payment**

NASDAQ support IRS trades with one upfront payment. The upfront amount must be agreed and registered as part of the original trade details. The amount, payer/receiver and the pay date shall be agreed by the parties. The currency must be SEK.

**Backloading historical interest rate swaps**

NASDAQ support registration of historical OTC Rates trades. With historical trades we refer to trades agreed before the current business date. For historical trades, already settled cash flows will not be managed by NASDAQ, only the remaining cash flows will be settled through NASDAQ.

Historical trades can be sent for clearing via MarkitWire, Clearing Workstation 1 and the OMnet API. Historical trades can also be sent directly to the clearinghouse using a template that is available upon request (email fixedincomesweden@nasdaq.com). The clearinghouse will simulate the collateral requirement for the historical trades in the file and, if necessary, request that collateral is pledged to the clearinghouse prior to trade registration. Once sufficient collateral is posted the clearinghouse will register the historical trades and they will be novated.

**Pre-novation**

Novation, meaning the stage at which the clearinghouse substitutes existing contracts with two new ones, in relation to the buyer and seller takes place following a pre-novation check. When a trade is novated by the clearinghouse, there is no counterparty relationship between the buyer and seller instead both parties have the clearinghouse as counterparty.

All interest rate swap transactions submitted for clearing will be subject to a pre-novation check. The purpose of a pre-novation check is to verify that both buyer and seller have sufficient collateral to cover both their existing portfolios and the new registered trades. If both parties have sufficient collateral to cover the new trades, the trades will be novated by the clearinghouse immediately. Should any party to a trade lack sufficient collateral the deal will be rejected.

**Compression and netting**

In collaboration with TriOptima Nasdaq offers a portfolio compression service that is available to members that clear swaps at Nasdaq and also have a membership at TriOptima. The netting service is mainly targeted for end clients but are open for all parties who clear swaps or forward rate agreements. For more information on compression and netting of OTC rates products please consult the “Compression service and manual netting” document available online alongside the product guides or contact the Fixed Income team.

**Shifting of variation margin and variation margin interest**

For SEK IRS, the market value is shifted on a daily basis. The shifting consists of two components:

- Variation margin (VM)
- Variation margin interest (PAI)
Both components are calculated at close of business on every business day (T). A portfolio with a positive variation margin will receive a VM payment the following bank day (T+1) and pay PAI on the bank day following T+1 (i.e. T+2). PAI calculations are based on STIBOR™ TN from day T. If STIBOR™ TN rate is negative the party receiving VM on T+1 will also receive PAI on T+2.

Shifting is done daily through the clearinghouse and all cash flows (incl. VM and PAI) are netted with other flows in the same currency to form one net amount to pay or receive per clearing day. Picture below illustrates the flow.