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## Forex Risk Management Policy

## **RATIONALE FOR THIS DOCUMENT**

India Glycols Ltd. (IGL) having exposures on account of exports, imports, income and expenditure in one or more foreign currencies is affected by currency movements, interest rate movements etc. This often implies a degree of uncertainty in terms of the effect on financial results and the company's ability to execute transactions on future dates with similar profit levels as envisaged at the onset.

The purpose of this document is to

- Outline the risk management practices in the market and the basis on which company should protect itself against unfavorable foreign currency and interest rate movements.
- To define the roles and responsibilities within the company with respect to its Corporate Hedging Policy.

• To prescribe general guidelines for day to day operations and to help understand the various aspects of a treasury on the basis of hypothetical examples.

### **EXPOSURES FACED BY IGL**

The functional currency of Indian corporate is the Indian Rupee (INR). The combination of the foreign currency and the functional currency is named a "currency pair", for instance, USD/INR. There are two types of currency exposures:

#### A. Translation Exposure

This exposure represents long-term investments of the company in foreign entities i.e., the equity held at these entities, but it can also include other methods of financing which have an equity-like character. The economic effects of an exchange rate change relate to the net investment in that entity. Translation adjustments that arise from consolidating that foreign entity do not impact cash flows and are not included in the net income, but are disclosed and accumulated in a separate component of the consolidated equity (that is, until sales or liquidation of the net investment in such foreign entity takes place).

India Glycols Ltd. (IGL) has equity holding in ABC Ltd., New York worth USD 10 Mio. As on 31.12.2005 at the rate of Rs.45/USD, the investment would be worth Rs.45 crs.

If the Rupee were to appreciate to Rs.43/USD, then the value of the investment in IGL's balance sheet would become Rs.43 crs, a fall of Rs.2 crs in the value of the investment.

This would represent Translation Exposure.

Sometimes the financial markets refer to "translation effects" on income statement positions, such as the foreign currency impact on sales. In order to distinguish between the translation exposure, as defined above in this policy, and the impact on the income statement, we shall refer to the effects on the income statement as "conversion effect".

## B. Transaction Exposure

A foreign currency transaction is one that is denominated or requires settlement in a different currency than INR. The economic effects of an exchange rate change will impact the cash flow directly and are, therefore, included in the net income.

The cash flows of each foreign currency over a period of time (e.g. 12 months) are described as the "currency exposure" of the company for that period of time.

There are four types of transaction exposures:

#### Booked exposure

Any outstanding (or not yet settled) foreign currency transaction is defined as a foreign currency exposure in the book of the reporting entity (e.g. an outstanding US-Dollar account receivable in Indian Entities' books). The difference between the exchange rate used when recording this foreign currency transaction and the exchange rate used to re-value it in the balance sheet represents the gain or loss of the foreign currency transaction.

IGL has receivables on account of exports worth USD 50 Mio which @ Rs.45/USD as on 31.12.2005 translates intoRs.225 crs.

A change of rate to Rs.43/USD would change the receivables Rs.215 crs, a negative cash flow of Rs.10 crs.

This would represent a Booked Exposure.

## • Economic Exposure

As business becomes increasingly global, exchange rate changes (volatility) become more important, even for a purely domestic firm operating in a global market. Firms have to pay more attention to exchange rate risk, and devise hedging strategies to manage and control currency risk. Even a purely domestic firm, using only domestic parts (no imports), selling only in the domestic market (no exports), all payables and receivables in local currency, is bound to be affected by changes in exchange rates.

IGL exports towels to USA. There is a competitor from China who is also exporting the same product to USA. Even if the rupee-dollar levels remain unchanged, and the Yuan depreciates against the dollar, the company in China would be in a position to offer the same product at more competitive rates to the buyer in the US, thus putting IGL at a disadvantage.

This represents Economic Exposure.

This represents the liquidity or cash holdings (net of overdraft) held in a currency other than INR. This would typically mean foreign currency accounts being maintained in banks within India. As in the case for the "booked exposure", the movement in the exchange rate of cash holdings and equivalents held in a foreign currency will represent a gain or loss of the foreign currency asset and to that extent would also affect the liquidity position of the company.

IGL. has an EEFC (Exchange Earner's Foreign Currency) Account with State Bank of India, Ludhiana. The balance of the account is USD 1.0 Mio, which as at 31.12.2005 is valued at Rs. 4.5 crs (@ Rs.45/USD).

A change in the rate to Rs.43/USD would result in a loss of Rs.0.20 crs in the value of the amount held in the account.

This represents Local Foreign Currency Exposure.

#### • Anticipated or Expected Exposure

The anticipated or expected currency exposure represents highly probable future foreign currency settlements of the Indian Entities which are not yet reflected in the book and, therefore, do not generate any exchange gains or losses in the financial statements. However, we can anticipate them and their direct impact on the profitability in case of a movement in the exchange rates.

The forecasted currency exposure arising from future sales and their corresponding collection of the account receivables of IGL would represent Anticipated or Expected Exposure.

## **VARIOUS TYPES OF FOREX RISK**

Risk has two components, exposure and uncertainty. This uncertainty would be on account of unpredictability of future events. Based on the exposures faced by IGL, the various risks facing it are:

## **Exchange Rate Risk**

The risk arising on account of movement in the exchange rates of all relevant currencies where the company has exposure in terms of

- Foreign currency denominated cash flows; and/or
- Foreign currency denominated assets/liabilities

Analyzing the financial impact arising from potential positive or negative exchange rate movements on the currency exposure can help assess this risk. The outcome of this analysis can then determine which foreign currencies should be tracked and monitored on an ongoing basis.

In the case of IGL, if money must be converted into a different currency to make a certain investment, changes in the value of the currency relative to the American dollar will affect the total loss or gain on the investment when the money is converted back.

This would expose the company to exchange rate risk.

The financial impact due to potential changes of exchange rates has to be quantified for each foreign currency exposure separately. The risk has to be quantified based on the shift of the spot exchange rates at the time of the analysis according to the volatility of the currency pair.

The evaluation shall be done based on the total booked and anticipated transaction exposures (no netting of outstanding hedge deals) for the next 12 months (rolling).

#### Interest rate risk

Interest rate movement in India and the dollar market can pose a risk when the company has an exposure to

- Long-term foreign currency assets/liabilities; and/or
- Long-term rupee assets/liabilities

Let us suppose IGL has fixed interest rate loan @ 8% p.a.. If during its tenure the floating interest rate goes down then IGL will be in disadvantage.

This exposes the company to interest rate risk. This can be mitigated by entering into fixed to floating interest rate swap.

There is always a possibility of a reduction in the value of a <u>security</u>, especially a <u>bond</u>, resulting from a rise in interest rates. This <u>risk</u> can be reduced by diversifying the duration of the fixed-income <u>investments</u> that are held at a given time. This is often referred to as *Risk Diversification*.

Let us suppose IGL has invested today in a one-year Rs.100 bond at 8% p.a. If during the year the interest rates go up to 9%, the value of the bond will go down to Rs. 99.0825 (108/1.09), from Rs.100.

This exposes the company to interest rate risk.

#### OBJECTIVES FOR THE FOREX RISK MANAGEMENT POLICY

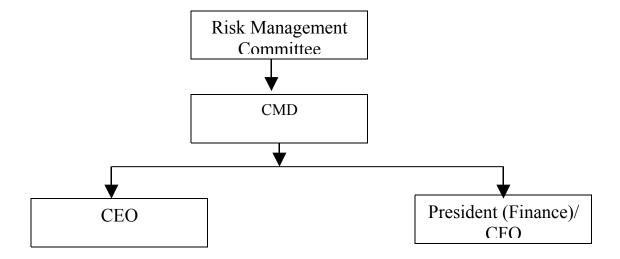
The broad objectives of this document are:

- To identify the Forex risks the company is exposed to due to the nature of business activity
- > To decide the process of management of these risks through a variety of risk management tools
- To establish processes to monitor and control the risks as per the process
- > To create an efficient process for reporting the key parameters measuring the risks and the performance of the Risk Management Tools

The process also covers the proposed authority and responsibility structure and is meant to cover all activities of the company with regards to management of Foreign exchange as well as interest rate risks.

#### ORGANIZATIONAL FLOW

For the purpose of the forex operations the organizational hierarchy levels would be



The constitution and functions of each of the hierarchy levels would be defined as below:

## 1. Risk Management Committee:

The Risk Management Committee is set up for reviewing the treasury and forex operations. This committee would be formed with the following objectives:

- Reviewing the current exposure of the company
- Reviewing & reporting on the risks facing the company
- Reviewing the entire forex operations.
- Reviewing Trigger Levels.
- Defining the authorization levels.
- Defining the hedging ratio range, the rules to be followed for hedging purposes by company and the mechanisms to be followed with respect to hedging decisions
- Authorizing the hedging instruments which can and should be used by company for hedging purposes.
- Maintaining control framework.
- Maintaining the Budget (USD/INR) for all Imports and Exports.

This committee may further create sub-committees, if desired, for assignment of specific responsibilities.

## The Constitution of the committee would be as under:

Chairman & Mg Director (CMD) Chief Executive Officer (CEO) President (Finance)/CFO Any other management personnel / Consultant whom the RMC will nominate for this purpose. However the RMC will submit its report to the Board of Directors on Quarterly basis.

#### Quorum -

The RMC would have a quorum so as to ensure its regular functioning. The following would be treated as a quorum.

## 1. Chairman & Mg Director (CMD)

The CMD would be overall in-charge and the chairman of the Risk Management Committee. He would ensure that the guidelines laid down by the RMC are been followed by the treasury.

## 2. . Chief Executive Officer (CEO)

The CEO would assume authority for the overall performance of the treasury operations as well as he would ensure that the guidelines laid down by the RMC are been followed by the treasury.

## 3. President Finance/CFO: (Treasury Head)

The CFO would assume authority and responsibility for the overall performance of the treasury operations (Front office/ Back Office). He would be the link between the Banks Treasury and the RMC. The functional responsibilities of the treasury head could be outlined in terms of criticality of function and materiality.

#### **Issue of Deal Confirmation to banks:**

CMD / CEO will be authorized to issue the deal conformation to the bank. However Vice President (F&A) and the Co Secy is also authorized (singly) to issue the deal confirmation to the bank.

#### **Critical Functions:**

The treasury head would be responsible for the following activities and any action on the same would require his approval:-

**a. Change in Policy:** Any decisions concerning change in policy parameters like recognition, benchmarking, stop loss, etc would require concurrence of the CMD. The CMD could suo moto or on the recommendation of the CFO may consider these changes and can approve the same.

- **b.** New Product Approval: Any new products desired to be done by the treasury should require the prior approval of CMD and the Board of Directors.
- **c. Increase in pre set limits:** Any increase in the monetary caps on exposure should require the approval of the CMD.
- **d. Personnel requirements and reorganizations:** These functions would come under the purview of the head of treasury/ CFO and could be decided by them.

## **Materiality:**

Not withstanding anything mentioned above, any transaction which exceeds a materiality threshold decided by the treasury should require the prior approval of the treasury head.

## 4. Front Office / Back Office Desk:

The front office desk is the heart of the treasury function. The primary objectives of the function desk are defined as follows:

- a. Track International Forex Movements
- b. Hedge Exposures within the FX guidelines
- c. Directional Positioning
- d. Execution of decisions laid down within the parameters of the RMC
- e. Execute trades whenever any stops or take profits are triggered.
- f. Tracking Regulatory changes and updation

The back office desk would be the support function for all the hierarchy levels. The functions of this desk would be as follows:

- a. Data assimilation from all user departments
- b. Updating of the MIS
- c. Reconcile the deals executed by the Front office Desk
- d. Generation of MIS reports for various hierarchy levels
- e. Reporting by exception
- f. Recording the Forex transaction in the books of accounts

## The Constitution of the Front Office Desk would be as under:

## **Chief Dealer:**

He would the head of the Front office Desk. All the nominated dealers would report to him. Over and above the primary objectives listed, the functions of the Chief Dealer would also include:

- a. Authorization for various actions carried out by the Dealers
- b. Reporting exceptions to the Head Treasury

#### Dealers:

It would include the nominated dealers who would operationally carry out the functions defined above.

#### The Constitution of the Back Office Desk would be as under

#### Head MIS:

He would the head of the Desk. All the nominated personnel in the MIS department would report to him.

#### Personnel.

These personnel would be the one who on a day-to-day basis perform all the above functions.

#### **HEDGING POLICY**

#### **Definition of Hedging**

A hedge is defined as an action taken in order to reduce the <u>risk</u> of adverse price <u>movements</u> in a <u>security</u>, by taking an <u>offsetting position</u> in a related security, such as an <u>option</u> or a <u>short sale</u>. These would include measures, such as deployment of financial instruments, for the purpose of safeguarding the value of a foreign currency exposure.

#### Importance and objective of Hedging

The purpose of hedging is to reduce the unpredictability arising on account of exchange rate movements and currency movements on cash flows, earnings and equity.

The objective of hedging is to

- Minimize transaction and translation losses on balance sheet items; and to
- Protect the anticipated exposures and risks, in the process mitigating the impact on profits

The RMC will issue Corporate Hedging Policy and will make rules and issue guidelines on the following subjects, among other things:-

- Rules for hedging
- Basic Hedging Instruments permitted by the company
- Parties to a hedge
- Hedging Ratio
- Selling of Local Foreign Currency Exposure
- Threshold amount for hedges without consultation
- The procedure for a hedging deal
- Decision Tree for a hedging decision

### Rules for Hedging

A hedging transaction should be done keeping in mind the following guidelines:

- The hedging instruments used and procedure for transacting deals should have been approved by the RMC.
- There should be local know-how of the hedging instrument.
- It should be possible to evaluate the deal as per the 'marked-to-market' concept in case of need and should be reported in accordance with the guidelines of the Hedging Policy.
- The hedging deals should be reported as per pre-defined reporting rules, regardless of the responsibility or hedged amount or duration of the hedge.
- The decision to hedge or not to hedge should be made keeping in mind the Hedging Ratio<sup>1</sup> of the company.

However, hedging should not be done permanently and automatically as in most circumstances the associated hedging costs would be expensive. Hedging should be carried only after the following things have been taken care of

- There has been an assessment of the key currencies to track and exposures to hedge
- There is a mechanism in place, which allows real-time monitoring of market conditions so as to allow the company to take advantage of favorable market development while minimizing the costs of hedging.

## Basic Hedging Instruments permitted as per IGL's Risk Management Policy

The company approves the following hedging instruments for the purpose of hedging currency and interest rate risks:-

- Spot Transactions
- FX Forward Contracts for covering Export/Import for USD/INR deals
- Principal Only Swaps
- Interest Rate Swaps

For detailed explanation and examples on the above-mentioned, refer **Annexure 1**.

#### Parties to a hedge

The company must follow the rules, laid down by the Hedging Policy, regarding the parties with which the company can enter into a hedging transaction. However the following specifications have been laid down for the same:-

- Hedging deals should only be done between the company and an authorized dealer (preferably a bank). The selection of a bank for this purpose should be from the RMC approved list of banks.
- No hedging transactions should take place between the Finance department and divisions and/or business units.

<sup>&</sup>lt;sup>1</sup> The Hedging Ratio is defined as the total amount hedged divided by the sum of booked and anticipated exposures. The adherence to this ratio is normally at the level of a currency pair and is valid by month.

## Hedging Ratio

A hedging ratio is described, as the ratio of number of forward/option contracts needed to hedge a position in the underlying instrument. Technically, it is defined as the total amount hedged divided by the sum of booked and anticipated exposures.

- The hedging ratio range of the sum of booked and anticipated exposures for a pre-decided time frame defines the framework for deciding to hedge or not to hedge.
- The hedging ratio is defined by the RMC and has to be adhered to by the company at the level of the relevant currency pairs.
- The following hedging ratio ranges have been suggested for broad guidelines:

Type of Exposure	For Payables/Receivables	Maximum permissible Hedging Ratio
Booked Exposure	0 - 12 months	80% to 100%
<b>Booked Exposure</b>	> 1 Year	50% to 75%
Anticipated Exposure	0 - 12 months	50%
Anticipated Exposure	> 1 Year	25%

- In case the above mentioned limits are required to be enhanced, then the approval from the RMC/CMD is required to be obtained.
- As long as the split between booked and anticipated exposures is not available, the hedging ratio range, as established for the anticipated exposure, will be applicable to the total exposure.
- However all the above limits are subject to regulations of FEMA issued by RBI from time to time and no violation of the RBI regulations should be done. FEMA regulations will supersede notwithstanding anything contrary mentioned in this document.

### Selling of Local Foreign Currency Exposure

The Hedging Policy must clearly specify the guidelines to be followed in the case of the selling of Local Foreign Currency Exposures.

Illustration: IGL which has decided that cash holdings in foreign currencies (in EEFC account) by the company, that are not needed for payments within the following 60 days or for settling hedging transactions must be sold within 7 days after clearance of the receipt by the bank.

IGL, in its Hedging Policy, has also specified that the threshold amount for having to sell the balance of liquidity in foreign currency is USD 1 Mio, or equivalent in foreign currency.

For the company to be able to hedge without prior approval from the CEO/ President (Finance), certain condition have to be met and certain limits to be followed.

The conditions to be met are:

- All rules set by the Hedging Policy should be strictly adhered to.
- The parties to a hedge, and choice of hedging instruments should be dictated by the Hedging Policy.
- All accounting and reporting standards should be adhered to.

The limits would also have to be prescribed by the Hedging Policy. At the outset the following limits have been prescribed (per month basis):

- In case of exports against anticipated exposure, the Aggregate Face Value<sup>2</sup> of the amount in question should not exceed USD 10 Mio per month or equivalent in USD.
- In case of imports against anticipated exposure, the aggregate face value of the hedge should not exceed USD 10 mio per month or equivalent in USD.
- In case of booked exposure, the aggregate value of the hedge in one month may be upto the maximum permissible hedging ratio.

#### The procedure for a hedging deal

The responsibility for hedging above the amount specified as the threshold amount for hedges without consultation by the company lies with the President (Finance), unless the company obtains prior written permission from the same to hedge above the said specified amount.

- Every step of the process for a hedging deal must be in accordance with the guidelines, if any, set by the **Hedging Policy**, lay down by the RMC.
- Irrespective of the amount or the duration of the hedging deal, the 'Rules for Hedging' specified earlier must be abided by.
- The hedging instrument must be as per 'Basic Hedging Instruments' permitted by the Group Hedging Policy.
- It is the company's responsibility to hedge, provided the parties being dealt with are as per 'Parties to a Hedge' specified by the Hedging Policy.
- The 'Hedging Ratio' decided upon by the Hedging Policy must be kept in mind.
- Hedging deals done without prior approval must be in accordance with the 'Threshold amount for hedges without consultation'.
- The decision making process must be as per the 'Decision Tree for a Hedging Decision' decided upon by the Hedging Policy. (Refer Annexure 2.)
- The reporting of the hedged deals must be as per the 'Internal Reporting' (described later) standards of the company.

## Decision Tree for a Hedging Decision

IGL follows a pre-determined process flow which must be followed by the company, when a decision needs to be taken regarding the hedging of some exposures and risks. This is depicted with the help of a flow chart given in **Annexure 2**.

<sup>&</sup>lt;sup>2</sup> The Aggregate Face Value represents the sum or aggregate value of all hedging transactions in any given month.

#### **RISK MAPPING PROCESS**

A comprehensive risk-mapping process is needed which would cover the following issues

- Legal compliance issues i.e. all potentialities which can create a situation for the company to overshoot legal guidelines
- Information technology i.e. keeping abreast with the latest developments in the industry
- Keeping track of industry best practices to keep in touch with the best in the industry
- Regulatory requirements and compliance with company's internal guidelines and limits
- Competitor activity analysis i.e. keeping abreast with relevant competitor activity that might pose a risk to the company's business
- Reputation i.e. mapping all potential risks for the company in terms of maintaining/enhancing its reputation in the business
- Business interruption i.e. mapping all potential threats to the smooth-functioning of the organization, operationally or otherwise

## 1. Risk Management Process for Current Account Exposures

The following would be considered as current account transactions for the Risk Management Process:

- 1. Imports
- 2. Exports
- 3. Any other exposures falling due within a period of one year.

## 1.1 Recognition

- 1. Imports -
  - Exposures would be considered on a rolling twelve month period basis
  - All projected exposures would be recognized from the first day of the month when they are projected
  - All actual exposures would be recognized on the basis of confirmed order/ LC opening date.
  - Projections would be adjusted for the actual exposures

## 2. Exports -

- Exposures would be considered on a rolling twelve month period basis
- All projected exposures would be recognized from the first day of the month when they are projected
- All actual exposures would be recognized on the basis of confirmed order with particulars of shipment & payment terms.
- Projections would be adjusted for the actual exposures

3. Any other exposures falling due within a period of one year – In case of exposures where projections could be made in advance, such projections to be made on the first day of the month of every month rollover. In other cases the exposure would be recognized on the first day when the information is available about the same.

#### 1.2 Benchmark:

- 1. Imports For the projections the benchmark for each month would be the *First Day Forward Rate* for the delivery month i.e. if the foreign currency is in premium in the forward market, then the applicable premium would be up to the last day of that month and if the foreign currency is in discount in the forward market, then the applicable discount would be till the first day of that month. In case of spill over in due date to next or previous month, Benchmark to be adjusted for swap differentials.
- 2. Exports For the projections the benchmark for each month would be the *First Day Forward Rate* for the delivery month i.e. if the foreign currency is in premium in the forward market, then the applicable premium would be till the first day of that month and if the foreign currency is in discount in the forward market, then the applicable discount would be up to the last day of that month. In case of spill over in due date to next or previous month, Benchmark to be adjusted for swap differentials.
- 3. Any other exposures falling due within a period of one year The benchmark would be the First Day Forward Rate on the first day of recognition of exposure.

## **1.3 Profitability Measurement**:

The Treasury function will be evaluated on the basis of the Transfer Pricing Method i.e. the comparison of the benchmark rate and the actual realization/payment rate.

## 1.4 Quantification of Risk: Risk - Reward Trigger levels:

IGL has defined its risk reward relationship in the following manner:

*Anticipated/ Expected Exposure:* 

Stop Loss: 30 Paisa per USD (or equivalent) worse from the booked rate/benchmark rate, as the case may be.

Take Profit: 75 Paisa per USD (or equivalent) better than the booked rate.

Stop loss to be followed rigorously. However take profit may be revised upward, on the basis of favorable view of the currency pair. The above levels will be reviewed by the RMC regularly, and may be changed if required.

In no case the RMC is authorized to deal in Cross Currency transactions / Derivatives / Exotic Options, and if the RMC thought that they want to deal such transactions, The Prior Approval from the Board of Directors / CMD will be required.

### Actual & Booked Exposure

Actual/ booked exposure once hedged should not be cancelled unless the situation so warrants. However if circumstances so warrants, RMC/ President (Finance) may decide to come out of the deals/ take corrective action at suitable target levels.

## 1.5 Reporting & Control:

The ultimate outcome of the risk management process should be in the form of reports which should set out the performance of the forex and treasury function in a clear, objective and unambiguous manner. The reports should be capable of quantifying the benefits of the risk management process. Also, they should be capable of highlighting defects in the process so that remedial action could be taken.

The reporting would be at two levels of management:

- a. Front Office Desk
- b. Risk Management Committee

For each of these levels there would be separate reports as follows:

#### a. Front Office Desk:

The Front Office Desk would need complete free hand information of all the exposures at any point of time. Hence it would be very necessary that MIS provided to them is comprehensive. The following reports would ensure that the same has been done:-

- 1. Exposure Report This report would inculcate all the exposures which are not yet closed. It would be generated for outflows as well as for inflows. It can be generated either currency wise as well as maturity wise.
- 2. Covered Position Report This would inculcate the covered positions both under forwards & options at any point of time. It would be generated for outflows as well as for inflows. Since it will also include Marked to Market value and Stop Loss/ Take Profit Trigger levels, so it is also normally called as MTM Report or SL/TP Report.
- 3. Settlement Through Delivery Report This would cover all the deals which have been settled by way of delivery, for any period of time, along with the profits/ losses on the same.
- 4. Settlement Through Cancellation Report This would cover all the deals which have been settled by way of cancellations, for any period of time, along with the profits/ losses on the same.
- 5. Bank Wise Summary of Hedges This would inculcate the bank wise covered positions for a time period. It would be generated for outflows as well as for inflows. This can be generated either currency wise or maturity wise.

#### b. Risk Management Committee:

The reports for the RMC which would enable the RMC to have a bird's eye view on the treasury performance. The following are the reports would be provided to the RMC:-

- 1. Bank Wise Summary of Hedges This would inculcate the bank wise covered positions for a time period. It would be generated for outflows as well as for inflows. This can be generated either currency wise or maturity wise.
- 2. Summary of Profitability Report This is a brief summary report of the realized as well as the unrealized profits on the all the exposures. It would be generated for outflows as well as for inflows

## **Frequency of Reporting**

Reports to be Prepared	Frequency	Level
Exposure Report	Weekly	RMC
Covered Positions Report/	Weekly	RMC
MTM Report (SL/TP Report)		
Settlement Through Delivery	Weekly	RMC
Report		
Settlement Through	Weekly	RMC
Cancellation Report		
Bank wise Summary of	Weekly	RMC
Hedge Report		
Summary of Profitability	Fortnightly	RMC/CMD
Report		

## **Reporting Formats:**

The format of the reports mentioned above is attached as a separate annexure.

## 2. Risk Management Process for Directional Positioning

IGL appreciates that the inherent volatility in the Forex Market offers opportunity to profit from the moves. It would closely monitor the forex markets and initiate positions which are in direction with the market to benefit from the movements.

## 2.1 Risk Appetite

IGL appreciates that, in order to capitalize on the market volatility, it is required to earmark a suitable amount as the risk capital, which would also represent the Risk limit on an annual basis for such operations. Such risk limits requires approval from the RMC.

#### Limits

CEO/ President (Finance) has the authority to allocate and approve individual dealer limits, currency pair, interest rates, tenor, transaction amount, etc.

## 2.2 Reporting & Control:

The ultimate outcome of the risk management process should be in the form of reports which should set out the performance of the forex and treasury function in a clear, objective and unambiguous manner. The reports should be capable of quantifying the benefits of the risk management process. Also, they should be capable of highlighting defects in the process so that remedial action could be taken.

The MIS would be generated for the following:

#### Front Office Desk -

The Front Office Desk would need complete free hand information of all the positions at any point of time. Hence it would be very necessary that MIS provided to them is comprehensive.

## Risk Management Committee -

The report for the RMC would enable it to have a bird's eye view on the entire function. This would be in the form of a summary report on trading - This would inculcate the daily closing mark-to-market on the open positions currency pair wise as well as the profitability on the closed positions.

## **Frequency of Reporting**

Reports to be Prepared	Frequency	Level
Covered Position Report/	Daily	RMC
MTM Report	-	
Summary of Profitability	Fortnightly	RMC/CMD
Report		

## **Reporting Formats:**

The format of the reports mentioned above is attached as a separate annexure.

#### 3. Risk Management Process for Capital Account Exposures

#### 3.1 Recognition:

- The entire loan exposure to be recognized considering a time horizon of 5 years after the moratorium period.
- A moratorium period considered would be till March 2010...
- For the purpose of recognition of the amount the entire loan exposure would be amortized in five equal annual installments after the moratorium period
- For the purpose of capital imports, exposure will be recognized on a rolling 12 month period basis.
- All projected import exposures would be recognized from the first day of the month when they are projected.
- All actual import exposure would be recognized on the basis of confirmed order/ LC opening date.

#### 3.2 Benchmark

For benchmarking purposes a distinctive rate would be considered for Currency Rate as well as Interest Rate Risk.

Currency Rate Risk – First Day Principal Only Swap Interest Rate Risk - First Day Coupon Only Swap For Import Exposure: For the projections the benchmark for each month would be the First Day Forward Rate for the delivery month i.e. if the foreign currency is in premium in the forward market, then the applicable premium would be up to the last day of that month and if the foreign currency is in discount in the forward market, then the applicable discount would be till the first day of that month. In case of spill over in due date to next or previous month, Benchmark to be adjusted for swap differentials.

### **3.3 Profitability Measurement**:

The Treasury function will be evaluated on the basis of the Transfer Pricing Method for the purpose of import and Market Rate Method for the purpose of loans. The calculation methodology for profit will be on the basis of the market rate prevailing to hedge the open exposure on the date of the reporting.

### 3.4 Quantification of Risk: Risk – Reward Trigger levels:

### Anticipated/ Expected Exposure

Stop Loss: 1% worse from the booked rate/ benchmark rate as the case may be.

Take Profit: 2.5 % better than the booked rate.

Stop loss to be followed rigorously. However take profit may be revised upward, on the basis of favorable view of the currency pair. The above levels will be reviewed by the RMC regularly, and may be changed if required.

## Actual & Booked Exposure

Actual/ booked exposure once hedged should not be cancelled unless the situation so warrants. However if circumstances so warrants, RMC/ President (Finance) may decide to come out of the deals/ take corrective action at suitable target levels. In case of swap deals against loans, the same may also be got cancelled as per the above mentioned trigger levels.

## 3.5 Reporting & Control:

The ultimate outcome of the risk management process should be in the form of reports which should set out the performance of the forex and treasury function in a clear, objective and unambiguous manner. The reports should be capable of quantifying the benefits of the risk management process. Also, they should be capable of highlighting defects in the process so that remedial action could be taken.

The MIS would be generated for the following:

#### a. Front Office Desk:

The Front Office Desk would need complete free hand information of all the exposures at any point of time. Hence it would be very necessary that MIS provided to them is comprehensive. The following reports would ensure that the same has been done:-

- 1. Exposure Report This report would inculcate all the exposures which are not yet closed. It would be generated for outflows as well as for inflows. It can be generated either currency wise as well as maturity wise.
- Covered Position Report This would inculcate the covered positions both under forwards & options at any point of time. It would be generated for outflows as well as for inflows. Since it will also include Marked to Market value and Stop Loss/ Take Profit Trigger levels, so it is also normally called as MTM Report or SL/TP Report.
- 3. Settlement Through Delivery Report This would cover all the deals which have been settled by way of delivery, for any period of time, alongwith the profits/losses on the same.
- 4. Settlement Through Cancellation Report This would cover all the deals which have been settled by way of cancellations, for any period of time, alongwith the profits/ losses on the same.
- 5. Bank Wise Summary of Hedges This would inculcate the bank wise covered positions for a time period. It would be generated for outflows as well as for inflows. This can be generated either currency wise or maturity wise.

## b. Risk Management Committee:

The reports for the RMC which would enable the RMC to have a bird's eye view on the treasury performance. The following are the reports would be provided to the RMC:-

- 1. Bank Wise Summary of Hedges This would inculcate the bank wise covered positions for a time period. It would be generated for outflows as well as for inflows. This can be generated either currency wise or maturity wise.
- 2. Summary of Profitability Report This is a brief summary report of the realized as well as the unrealized profits on the all the exposures. It would be generated for outflows as well as for inflows

### **Frequency of Reporting**

Reports to be Prepared	Frequency	Level
Exposure Report	Weekly	RMC
Covered Positions Report/	Weekly	RMC
MTM Report (SL/TP Report)		
Settlement Through Delivery	Weekly	RMC
Report		
Settlement Through	Weekly	RMC
Cancellation Report		
Bank wise Summary of	Weekly	RMC
Hedge Report		
Summary of Profitability	Fortnightly	RMC/CMD
Report		

### **Reporting Formats:**

The format of the reports mentioned above is attached as a separate annexure.

#### Annexure 1

## **Basic Hedging Instruments**

### **Spot transactions**

A spot transaction is a binding obligation between a company and the bank to buy/sell a specified amount of foreign currency at an agreed exchange rate in two business days time.

A company using the spot market to deal in foreign currency is using the simplest method available. However, it also carries the most risk as it does not allow the company to protect against adverse movements in exchange rates between pricing a contract and the need to buy/sell the foreign currency.

#### **FX Forward Contracts**

A Currency Forward Contract is when a company enters into an agreement with a bank to buy or sell USD/INR at some future date at a predetermined rate of exchange (called the "forward rate"). The forward rate agreed upon by the Customer and the Bank will be applied when the transaction is actually effected.

IGL. needs to pay a specific sum to a foreign supplier in two months' time. To effect payment, they will have to buy the currency from the bank. One possible course of action is to wait till the very last moment, facing the threat of unpredictable exchange rate variations.

Instead, IGL signs a Forward Contract with the Bank, specifying in advance the exchange rate at which the currency will be sold.

No additional charges are made for transactions effected on a forward-rate basis, which provides an additional advantage for corporate to enter into such agreements and hedge their currency risks.

#### **Principal Only Swaps**

This would be an instrument to hedge against or gain by the movement of one currency against another. Assuming constant interest rates, a corporate who has a fixed rate INR liability, and holding the view that the INR would appreciate against the dollar in future, will look at paying a fixed amount of USD and receive fix amount in Indian rupee.

IGL has an INR loan of 45 Crs. The current exchange rate is Rs.45/USD and the view is that the rupee will appreciate to Rs.43/USD.

In this scenario, it will make sense for IGL to swap its principal amount and convert the same into USD 10 M, as on maturity, the company will only need to pay 43 Crs to pay off the loan.

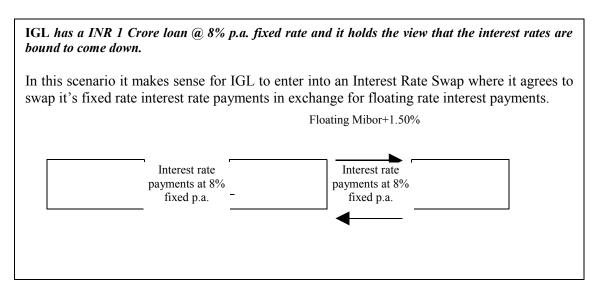
USD 10 M

USD 10 M

INR 45 Crs

### **Interest Rate Swap**

An interest rate swap is a negotiated contractual agreement between two parties to exchange a series of interest payments for a stated period of time. Usually, one party will make fixed rate payments while the other makes floating rate payments on the same Notional Principal amount<sup>3</sup>. Fixed/Floating conversion can be used to accommodate interest rate views without altering the underlying asset or liability, or to achieve better rates than are available in the primary markets.

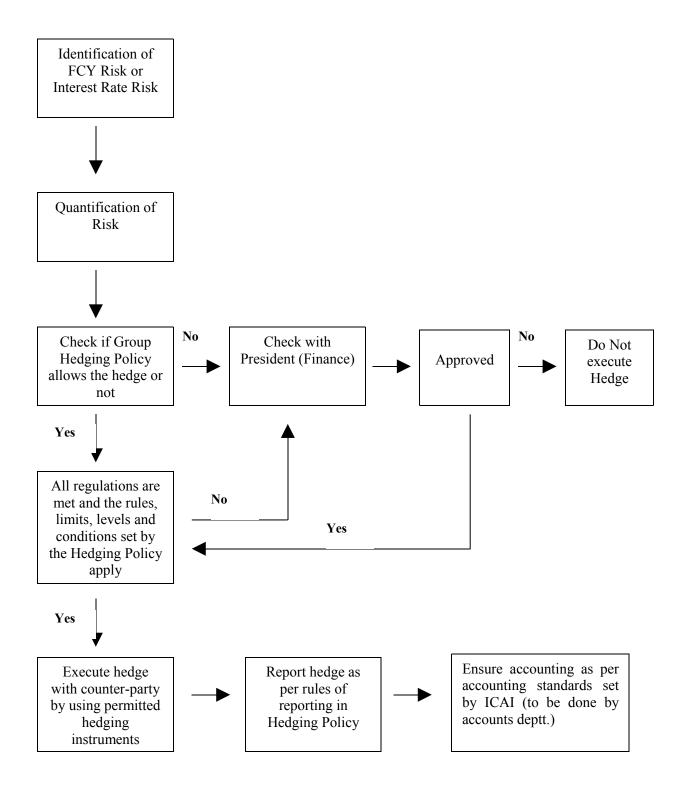


Interest payments are made on the period end-date. On that date, rather than both parties making full payments, the party owing the largest amount will make a net payment.

Annexure 2

<sup>&</sup>lt;sup>3</sup> The term Notional Principal amount is used because no actual principal payments are exchanged, only the relevant interest payments that accrue on that Notional Principal are exchanged.

## **Decision Tree for a Hedging Decision**



# **Exposure Report for Imports**

Sr. No.	Supplier	Description of Goods	LC No.	Dated	LC Issuing Bank	Currency	Amount (FC)	Latest Ship Date	Expiry Date	Tenor/ Payment Terms	Budgeted Rate	Shipment Value (FC)	Date	Expected Payment Date/ Remarks
												-		

# **Exposure Report for Exports**

Sr No.	Division	Customer	Order No.	Currency	Shipment Amount (FC)	Expected Shipment Date	Tenor/ Payment Terms	Expected Realisation Date	Budgeted Rate	Covered Amount	Remarks

## Covered Positions Report/ MTM Report/ SL,TP Report

Currency Pair	Date of Contract	Bank	Fwd Contract No.	Contract Amount	Delivery Date	Covered Rate	Cancelled Amount	Balance O/ S	Current Market Rate	MTM Profit/ (Loss)	SL/TP/ OK

Note: Separate report for Receivables & Payables should be prepared or the report may be divided into two parts ie. Purchase Contracts & Sales Contracts.

# **Settlement Through Delivery Report**

Date of Contract	Bank	Contract No.	Contract Amount	Delivery Date	Covered Rate	Date of Actual Delivery	Delivery Amount	Bank Ref. No.	Market Rate	Benchmark Rate	P/L on MTM	P/L Ag Benchmark

# **Settlement Through Cancellation Report**

Date of Contract	Bank	Contract No.	Contract Amount	Delivery Date	Covered Rate	Cancell- ation Date	Cancell- ation Amt.	Cancell- ation Rate	Benchmark Rate	P/L on MTM	P/L Ag Benchmark

# **Bank Wise Summary of Hedge Report**

	-	Forv	vard Cont	racts			0	ption Deal	s		
Particulars	Bank 1	Bank 2	Bank 3	Bank 4	Total	Bank 1	Bank 2	Bank 3	Bank 4	Total	Grand Total

# **Summary of Profitability Report**

Particulars	Currency	Settled Thru Cancellations		Settled Thru Delivery		Open Positions	
		P/L on MTM	P/L Ag Benchmark	P/L on MTM	P/L Ag Benchmark	P/L on MTM	P/L Ag Benchmark
Exports							
Imports							
Capital Imports							