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A. INTRODUCTION

The purpose of this Policy is to ensure that each of you is aware of the company’s standards for risk-taking while conducting business and to provide an easy-to-access guide any time you have a question. The Risk Management Group will currently cover Market Risk, Credit Risk, Process Risk and other risks as detailed in these documents. Each risk is covered within this Policy. This Policy will apply across all products, throughout the firm. Policies with respect to specific risks arising out of a particular product or product groups will be covered in the annexure or in documented process notes with appropriate sign-offs, or in the relevant New Product Review documentation, and filed by Risk Management.
B. RATIONALE

DSP Merrill Lynch Ltd. (DSPML) is affiliate of Merrill Lynch & Co. (ML). All policies have to be approved by DSPML’s Executive Committee and may be tailored to context of DSPML’s business activities. Hence this Risk Policy and its accompanying documentation. This document was approved by the Executive Committee at a meeting on April 27, 2000.

It is the endeavor of DSPML and the Risk Management Group to align policies with those established for Merrill Lynch with a view to facilitate compatibility in the management of risk.
C. AIM AND SCOPE

The aim of risk management is to enable DSP Merrill Lynch Ltd. (DSPML), to make consistent investment, portfolio and business decisions across all units and departments based on risk-adjusted return on capital or an equivalent measure.

This aim and the policy set forth here aids DSPML in its stated objective of being, “singularly positioned and strategically committed to leadership as the pre-eminent financial management and advisory company in India.”

We would like to clarify here, that implementation of this policy will only facilitate better management of risk not its elimination. The business unit or department (BU) that contracts with outside third parties on instruments, funds or services will be the primary oversight objective for the Risk Management Group (RMG).

If you are a DSPML relationship manager, sales person, investment banker or trader (henceforth termed “transactor”), you are required to review this policy. This requirement also applies to support heads, supervisors and personnel in the following areas: Finance, Operations, Risk Management, and Law and Compliance. All DSPML employees and Senior Management regardless of their function are encouraged to read the policy. If you have questions about whether this requirement applies to you, ask your manager. Managers can check with RMG to resolve any questions.
D. DEFINITIONS

1. Market Risks
Market risk is the generic term that includes all Price and Liquidity Risk.

Price Risk is the risk that DSPML's earnings or capital decline due to changes in market factors. A market factor is any price or rate which is used directly to value a financial instrument; market factors include interest and foreign exchange rates, fixed income, equity and commodity prices, spreads between instrument rates or prices and all their implied volatilities.

Liquidity Risk is the risk to earnings, capital and reputation should DSPML be unable to meet a financial obligation when it becomes due. Liquidity risk includes the inability to manage unexpected market conditions that may lead to changes in funding sources or impair our ability to liquidate asset, origination or trading positions in an orderly way.

2. Credit Risks
Credit Risk arises from any transaction that creates an actual or potential obligation to pay DSPML, including any deferral of payment through pricing arrangements. Credit risk can generally be classified into direct credit risk, inventory risk and contingent risk.

Direct Credit Risk is the risk that a counterparty will default on or before settlement date. This exposure can be divided into two parts and is dependent on the timing of the potential default, Settlement Exposure (SE) and Pre-Settlement Exposure (PSE).

Settlement Exposure (SE) occurs on the date of settlement, when exchange of value between counterparties does not take place simultaneously. We have a risk where the counterparty will default after we have fulfilled our side of the deal and hence, the entire transaction is at risk. Settlement risk begins from the time an outgoing payment instruction cannot be recalled. In some markets this may be one or two days prior to actual settlement date and continues until the systems can confirm receipt of payment. For example, if we have sold a security to a counterparty, and in the absence of any payment guarantee system, we were to transfer the securities to its name on the settlement date for which we where paid by near-cash instrument. The risk that the instrument would not be honored, we having fulfilled our commitment would be termed as SE. In this example, the total contract value would be at risk.

Delivery-versus-payment (DVP) systems, such as the Reserve Bank of India’s (RBI’s) Statutory General Ledger (SGL) system, or delivery-after-payment (DAP) for sold transactions or delivery-before-payment (DBP) for buy transactions mitigate SE.

Pre-Settlement Exposure (PSE) occurs when forward, future or derivative instruments are traded. Funds and or instruments are exchanged on future settlement dates, i.e. beyond spot date. Therefore PSE quantifies the risk that our counterparty fails before settlement date or is unwilling to settle the contract due to its unattractiveness or 'out-of-the-money' position. For example, if in the above transaction, we were to settle a week from the trade date, we would incur PSE for seven days. On the settlement date, PSE would revert to SE. Netting agreements mitigate PSE.

The value of the PSE would be equal to the current Mark-To-Market (MTM) value of the contract plus the Likely Increase in Value (LIV) of the contract over its lifetime. In the above example the life of the contract is seven days. LIV is calculated based on the historical price movements and other statistical simulations. Thus, on each day we would MTM the outstanding contracts, and add on the LIV to get the total PSE. Merrill Lynch has a similar approach worldwide and when derivative products are implemented within DSPML, we will adopt an appropriate methodology to approve, measure and monitor risk exposures of these derivative transactions.
Inventory Risk is the risk that the market value of a security or other debt instrument will fall when the perceived or actual creditworthiness of the issuer changes. Ratings downgrades by credit rating agencies are covered under perceived defaults. This risk is synonymous with issuer risk.

Contingent Risk is the potential liability resulting from the deterioration of an issuer who has sold securities through DSPML.

3. Process Risks

Loosely it’s been defined as those risks that are not covered under the umbrella of market and credit risks. Process Risk more accurately, is the risk of incurring losses resulting from inadequate controls or business disruptions. It is often associated with human error, system failure, or inadequate procedures and controls (i.e., people, systems, internal processes, or external events). It is independent, not a subset, of market or credit risk.

The e-commerce and e-trading initiative, as well as our expansion into derivatives, financial futures and options markets will expose us to higher levels of process risk. Our approach is to ensure that effective Process Risk Management will occur across all DSPML businesses. We intend to raise the firm’s consciousness by fostering best practices, facilitating cross-communication and developing meaningful measures to track Process Risk within the firm.
E. ROLES AND RESPONSIBILITIES OF RISK MANAGEMENT GROUP

1. Structure:
At DSPML, Market, Credit and Process Risk Management are housed within the Risk Management Group (RMG). RMG is an independent body, headed by a Vice President or higher designation, and who reports directly to Asia-Pacific Regional Risk Management Group of Merrill Lynch (MLAPR-RMG), the relevant business risk heads (e.g.: IPCG Risk Management or Treasury Risk Management) and the Chief Administrative Officer of DSPML.

RMG is focused along product lines, and will also take charge of Market, Credit, and Process Risk, focused along product, counterparty, and process lines. RMG will be staffed with independent professionals responsible for maintaining daily contact with specific, product areas, and client-service areas.

2. Objective:
The primary objective of Market Risk Management is to control market risk incurred by DSPML with a view to preventing unacceptable losses. The primary objective of Credit Risk Management is to provide an effective means of identifying, measuring and monitoring credit exposures incurred by DSPML, and to keep such risk at or below predetermined levels. The focus of Process Risk Management is to monitor, analyze and manage risk levels stemming from inadequate controls and or business disruptions.

3. Mechanics:
Risk management begins at the Business Unit (BU) level. Risk Management is responsible for measuring various risk levels and ensuring that the BUs and their products are within limits assigned by the firm's management in accordance with the firm's guidelines.

The responsibility for determining the acceptable/unacceptable levels for each of the above risks and for assuring that the above referenced risk objectives are met rests with DSPML's Senior Management and BU heads on the recommendation of Risk Management.

The Head of RMG, also functions as the Credit Officer and has the authority to require reductions in specific trading desk exposures, veto proposed transactions, and require traders to enter into transactions to hedge market risk exposures, or otherwise reduce inventory or other exposures.

Also, corporate policy requires prior approval from RMG for certain classes of transactions, including: new financial products; proposed equity and debt underwriting; derivatives, and other similar transactions.

BUs may execute transactions only within their product authority, which is determined by the DSPML Executive Committee and within predetermined limits, established by RMG and customized for each product. Existing positions and exposures are regularly compared by managers and by RMG with the predetermined limits.

4. Responsibilities:
RMG has responsibility, among other duties, for the following functions:

i) developing and documenting DSPML's Risk Management policies and procedures which has been adopted by the DSPML Executive Committee;

ii) allocating and applying the Risk Management Policy throughout the firm, by setting market, credit, and process limits among the core business units and in the aggregate;

iii) monitoring market, credits and process risk exposure, in the aggregate and by core business unit and by counterparties;
iv) reviewing, approving and documenting market, credit and process limits, exceptions thereto and monitoring and enforcing limits for all product areas, and modifying limits or establishing new limits as market conditions require;

v) establishing, reviewing and maintaining the internal credit ratings to counterparties that are used to manage the DSPML’s credit risk;

vi) reviewing, approving and documenting valuation models;

vii) in cooperation with Treasury, Finance and appropriate business management, developing policies for capital allocation and the determination of reserves;

viii) regularly subjecting market, credit and process risk components to “worst-case-loss” scenario analyses;

ix) regularly meeting with CAO to discuss current market, credit and process risks and to communicate changes in risk posture;

x) regularly reporting to the CAO, Risk Oversight Committee and the Executive Committee regarding the Firm’s market risk, credit exposures and process risk;

xi) reporting to Business Unit, CAO, Risk Oversight Committee and Senior management with respect to limit violations and potential internal disciplinary actions;

xii) serving on various corporate governance committees established by the Firm including the New Product Review Committee; Capital Commitment Committee, and Risk Oversight Committee;

5. Resources:
Risk Management has at its disposal a variety of systems for measuring and monitoring risk and employs statistical techniques for aggregating risks as applicable. On-line trading and risk monitoring systems (such as IDMMS or Summit) allow Risk Management to track established limit levels and exposures. Risk Management information systems compare established trading limits with actual positions to monitor compliance with limits. Risk Management can also access trading systems to allow for monitoring of positions and for performing scenario analyses.

In addition to the above, all trading areas will be required to perform a series of stress simulations on their portfolios, the results of which are communicated to Risk Management. These simulations are aggregated and enable Risk Management to have current information on risk exposures.

6. Model Risk:
Mathematical models are widely used to mark and manage the risk of trading positions credit risk and accounting valuation. Risk Management will serve as an independent second set of eyes on all trading, accounting and risk management models. The overall purpose is to strengthen the ability of the Risk Management and the Business Units to measure and manage model risk, to give regulatory agencies further confidence in our models and to obtain regulatory model approval where required.
F. DSPML CORPORATE GOVERNANCE COMMITTEES

1. New Product Review Committee (NPRC)
   The policy requires comprehensive reviews of all new initiatives. These include products which: are new to DSPML; present unusual risks; involve new trading or valuation processes; are new to a geographic region; are marketed to a new class of counterparties; involve new operational flows; raise new licensing requirements, etc. The DSPML NPRC is headed by the CFO and includes all support heads and RMG Head. At DSPML, the Executive Committee reviews all new products once signed-off by the NPRC.

The NPR procedures require:
1) A product memorandum (in the same format as MLs NPRC);
2) Meetings to be held with each support area to identify and address all major issues and sign-off from relevant support heads;
3) Determination of which BU will market and/or trade the product. If multiple, start with the BU in which the majority of the business will be transacted);
4) The DSPML NPRC may recommend whether products and/or twist and wrinkles need to be presented for approval to an appropriate ML NPR Committee;
5) The CAO may require products and/or twist and wrinkles to go through an appropriate ML NPR Committee.
6) The BU is the owner of the NPR process, and is responsible for NPR content and adhering to the NPR on implementation of the product.

2. Capital Commitment Committee (CCC)
   The CCC reviews commitments of DSPML's capital in connection with equity and equity-linked underwritings, fixed income underwriting commitments, backstops, spread locks, syndication of loan facilities, and transactions with similar risk. CCC meetings generally include IBK head, senior investment bankers, legal counsel, research, Equity/Debt Capital Markets, CAO, Trading Heads, and Risk Management. The IBK head will chair the CCC.

   The CCC will also review:
   1) Leveraged transactions with certain;
   2) Transactions with any counterparty with high firm profits (e.g. a guaranteed return in excess of 25% of initial investment);
   3) Restructuring of transactions/portfolios with current mark-to-market losses;
   4) Economic equivalent of a loan and not previously reviewed by CCC;
   5) The CCC meeting will review term sheets, scenario analysis (if any) and completed Client Information Form.

3. Risk Oversight Committee (ROC)
   The ROC will investigate significant control events, material losses or exposures, or violations of the Risk Management Policy. The Risk Manager will present monthly statements reviewing risk information and concerns to the ROC. ROC will review and action items presented, or if warranted mark them to the Executive Committee for further discussion.

   The ROC chaired by RMG Head and includes senior representatives from Corporate Strategy, Finance, Law & Compliance, Head of Internal Audit and the CAO.
G. SALES/MARKETING

The following responsibilities are applicable to all transactors and sales/marketing units.

1. Client/Counterparty Relationship
   a. Determine the identity of the Client/Counterparty (including full legal name).
   b. Determine who is authorized to act for the client and the scope of that authority.
   c. Consider levels of client experience, investment objectives, and any legal/regulatory restrictions.
   d. Understand the nature of the relationship of the client to others involved in a transaction (e.g., affiliate large shareholder, reporting obligations, etc.).

2. Suitability Considerations
   a. Must have reasonable grounds to make a recommendation;
   b. Must determine client ability to bear and understand the risks;
   c. Client must be making its own investment.
   d. Situations to raise with management: If in the transactors’ judgement, the client:
      i) relies on us and does not conduct an independent analysis;
      ii) appears to be represented by inexperienced intermediary;
      iii) seems to be increasing market exposure in order to recoup losses.

3. Account Opening
   a. Work with Operations regarding the relevant account opening and documentation requirements and procedures;
   b. Comply with all “Know Your Client” requirements and have all account opening forms and agreements complete in the stipulated time;
   c. Provide Risk Management with all required information and documentation to enable them to conduct a proper evaluation of the credit, market and other risks involved.
   d. Present the account opening forms to Business Management, Risk Management and Law & Compliance for approval.

4. Transaction Execution
   a. If this a new product, follow NPRC procedure;
   b. Required information must be recorded accurately and timely on order tickets/trade blotters, etc;
   c. Account numbers or account designation must generally be provided at the time of order entry;
   d. Executions must be done only by a transactor authorized to execute the specific trade.

5. Integrity of Data
   Order tickets, term sheets and other materials which will become part of DSPML’s permanent books and records must be accurate and completed in accordance with applicable policies.

6. Credit Risk Management
   Approvals are required in most cases prior to the execution of a trade with a client.
   a. Every transactor must be familiar with application of polices regarding credit approvals;
   b. Every derivative trade requires credit pre-approval;
   c. Violations of pre-approval processes or existing limits will result in disciplinary action;
   d. Risk Management may exercise its authority to enforce reevaluations of exposures.

7. Market Risk Management
   Though generally applicable to traders and others who commit the firm’s capital, salespersons and marketers are expected to have a general familiarity with the Firm’s policies regarding Market Risk.

8. Primary/Secondary Split
   1. All new issues positions, devolvements, or mis-deals, must be transferred to secondary trading based on a predetermined schedule (e.g. 45 days after pricing);
   2. The positions are to be transferred based on the secondary desk bid or at a mutually agreed rate, these agreements are generally documented and signed-off;
H. TRADING – Debt, Equity and Derivatives

1. Authorization/Limits
   a. Trade only products specifically authorized by trading management and as documented in the NPR or its revisions;
   b. Trade within applicable risk limits provided by Market and Credit Risk Management;
   c. Trade within any applicable position limits, and specific trading procedures set by exchanges and other regulators (e.g. RBI, SEBI, BSE/NSE regulations and or bye-laws);
   d. Trade only with counterparties as established and pre-approved by Credit Risk Management;
   e. Breaches of limits will result in disciplinary action.

2. Pricing of inventory/transactions
   a. Markings must be reasonable, consistent, and have the concurrence of CFO, the Risk manager, and the relevant business head.
   b. On a best practice basis, markings should be independent of the desk quoting prices for that product.
   c. The rationale and methodology for marking illiquid or non-traded securities should be documented and filed.
   d. Market orders should be executed consistently with best execution obligations, generally at the highest bid/lowest offer or better.
   e. All pricing and valuation models must be reviewed and approved by the Risk Management Group.

3. Integrity of Data
   Order tickets trade blotters, and other materials which will become part of the Firm’s permanent books and records must be accurate and timely completed, all desk risk reporting requirements, including the timely and accurate submission of risk data must be honored.

4. Restricted List/Chinese Walls
   May restrict research / solicitation / trading activities for securities which some area of DSPML may be in possession of material non public information. (as per policy issued by Law and Compliance).

5. Prohibited Activities
   The policy by Law and Compliance with respect to prohibited activities applies to all trading activity.
   a. Collusive manipulative conduct;
   b. Parking or prearranged trades;
   c. Tax/accounting driven, window dressing trades with no market risk exposure;
   d. "As of" trades (permissible only if a trade occurred but not booked);
   e. Frontrunning and piggy backing;
   f. Cross trades between accounts that have the same beneficial ownership;
   g. "Back ing away" from published quotations;
   h. "Marking the close/open". Marking the close refers to transactions executed at or just before the market close to print a favorable price for inappropriate purposes such as inflating position valuations or avoiding margin calls.

Transactions which appear to have been effected for such purposes invite scrutiny and may precipitate severe regulatory and/or legal consequences. You must not knowingly participate in or assist clients in executing such transactions. If you observe transactions which appear to suggest such intent, advise your Manager.

6. New Product Review Committee (NPRC)
   A determination must be made regarding whether or not a transaction needs to be reviewed by the NPRC. This determination is made within the guidelines set forth in the NPR Policy and/or section F-1 above.
7. Primary/Secondary Split
a. All new issues positions, devolvements, or mis-deals, must be transferred to secondary trading based on a predetermined schedule (e.g. 45 days after pricing);
b. The positions are to be transferred based on the secondary desk bid or at a mutually agreed rate, these agreements are generally documented and signed-off;

8. Aged Inventory Reserve Policy
a. Finance will charge a reserve against certain securities which have been in inventory in excess of a predetermined period.
b. The reserve amount will be determined annually by Finance at the time of the budget.
c. Reserves are to be forfeited to Trading desk when established and will not be returned when the aged position is sold;
d. Hedging positions and restricted inventory are exempt from these requirements;
I. RESPONSIBILITIES OF SUPERVISORS AND BUSINESS HEADS

Duty to Supervise
1. Regulators may impose sanctions against firms and individual managers for failure to adequately supervise employees with a view towards preventing violations of securities law or other regulations;
2. Business Unit Management is expected to investigate thoroughly any instance of misconduct and take appropriate corrective and disciplinary action, including reporting to relevant regulators, as appropriate. The same must be reported to senior management in a timely manner.

Desk Head Responsibilities
1. Responsible for all activities of all direct reports including registrations, continuing education requirements, employee trading and outside interests;
2. All managers are responsible for all communications by their employees with third parties, including manual correspondence, faxes, and all electronic correspondence, Internet, E-mails, Bloomberg, etc;
3. Sales/Marketing Managers must review all client relationships, with particular sensitivities towards active accounts, accounts with large losses/exposures, public fund entities, any quasi retail accounts (small Corporates; accounts for senior executives serviced by DSPML salespersons) accounts with special relationships with issuers (large shareholders, common board members, etc);
4. Trading Managers should regularly review: trades; P&L reports; position markings; aged inventory; risk/credit limits; hedging strategies; error records; cancel and corrects; reserves; electronic and other correspondence in accordance with applicable policies);
5. Managers must document all reviews and bring any serious financial, operational, legal, compliance or regulatory issues to the attention of Risk Management, Law & Compliance and Senior Management;
6. All managers are responsible to verify that all their employees are appropriately trained to conduct the activities for which they are authorized;
J. MARKET RISK LIMITS

1. Overview and Scope
Included in this policy are the following: the documentation of authorized Risk Limits, qualitative factors considered when setting limits, the monitoring of positions against limits and the ramifications of violating limits.

RMG is responsible for setting DSPML’s trading limits on the recommendation of the BU and approval of the Executive Committee and APR-RMG. RMG sets limits at the trading desk level. It does not set limits at the Firm level, the regulatory level or at the legal entity level.

2. Documentation
Requests for limit increases will be considered when received from the trading desk head or an individual deputized by the desk head.

**Permanent Limits**
- a. Correspondence is distributed to BU, Finance, RMG, Operations, Risk Oversight Committee, Regional Risk Management in Hong Kong (APR-RMG) and others, as relevant.
- b. The Merrill Lynch Position versus Limit (MLPL) system is updated by the Finance to reflect the permanent limit via e-mail to system administrators in New York or on Bloomberg when installed. Also, limits will be updated on local systems such as IDMMS, LES, etc.
- c. All permanent limit correspondence is maintained in the RMG limit library at DSPML and APR-RMG.

**Temporary Limits**
- a. All limit increases must be approved by the RMG head and have concurrence of APR-RMG head or designate.
- b. Correspondence (e-mail, memorandum, or limit extension form) is sent to trading management, Operations, Finance and RMG-APR files communicating the temporary limit changes. This correspondence includes the following:
  - i) permanent limit
  - ii) temporary limit
  - iii) rationale for change
  - iv) expiration date of temporary limit
- c. MLPL is updated by Finance to reflect the temporary limit. Note that we expect many temporary limit extension requests as it is the practice of RMG to set standing limits fairly tight.

3. Limit Setting: Qualitative Factors

I. Assessment of the Current Market Environment
A major variable in determining appropriate limits is market environment. Included in the assessment of market environment are the following:
- a. Liquidity
- b. Volatility
- c. New Issue timing
- d. Regulatory/political landscape (e.g. potential changes in laws, establishment of exchange controls, imposition of taxes, change in interest rate levels, yield curves, etc.)
- e. Customer flows
- f. New business requirements/budgets

II. Other Relevant Considerations
Other variables that are assessed in order to determine limits and/or revision to limits include the following:
- a. Confidence in trading desk personnel (traders and trading management)
b. Historical performance of the product (including profit & loss, business cycle, stress scenarios)
c. The firm’s current tolerance for risk
d. Availability of hedge instruments/ease of hedging risks
e. Adequacy of systems to process, monitor and settle the volumes of trades
f. Adequacy of financial controls and reporting
g. Adequacy of Operational backup to settle trades

4. Monitoring of Position vs. Limits
a. Limits are reviewed for change either upon request from business unit management or when the environment changes.
b. Limit compliance is monitored by way of the firm’s Over the Limit report (“OTL”) resident with MLPL and with other systems adopted by DSPML (e.g. IDMMS, LES, etc.).

5. Violations
Many over the limit events result from circumstances that are either beyond a trader’s control (i.e. system errors) or are not economical to attempt to prevent. The RMG response to limit violations depends on the nature of the violation, detailed as follows:

<table>
<thead>
<tr>
<th>Violation Type</th>
<th>RMG Response</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>BUCKET A</strong></td>
<td></td>
</tr>
<tr>
<td>System Error</td>
<td>The nature of the violation is documented and maintained in the data fail log within Risk Management</td>
</tr>
<tr>
<td>Input error/Ticket error</td>
<td></td>
</tr>
<tr>
<td>Market related excess</td>
<td></td>
</tr>
<tr>
<td>Limit Structure (curve violations straddling the curve bucket point)</td>
<td></td>
</tr>
<tr>
<td>Limit under review</td>
<td></td>
</tr>
<tr>
<td><strong>BUCKET B</strong></td>
<td></td>
</tr>
<tr>
<td>All other violations other than those captured in BUCKET A</td>
<td>The Risk Manager, depending on the severity and circumstances, may require the desk to unwind the position creating the violation, may reduce limits or not issue any limit increases. All violations are documented and maintained in the limit violation correspondence file and the data fail log.</td>
</tr>
</tbody>
</table>

If in the judgment of the Risk Manager, a flagrant limit violation occurs, RMG may escalate the event to CAO, Risk Oversight Committee, Executive Committee and MLAPR-RMG.
K. MODEL RISK POLICIES AND PROCEDURES

1. Overview and Scope
Mathematical models are widely used to mark and manage the risk of trading positions. Risk Management will serve as an independent second set of eyes on all trading and risk management models. The overall purpose is to strengthen the ability of the Risk Management and the Business Units to measure and manage model risk, to give regulatory agencies further confidence in our models and to obtain regulatory model approval where required.

2. Model Risk Responsibilities of Risk Management

I. Risk Management’s Primary Quantitative Role
1. Periodically and independently review/test mathematical models, as well as certain derived parameters, used for valuation/P&L calculation/risk management by:
   a. Business Units
   b. Finance/Treasury and Operations (together Product Control)
   c. Risk Management
2. Ensure that similar products are valued consistently throughout DSPML
3. Ensure that models are consistent with DSPML’s general valuation and reserve policies
4. Ensure non-preponderance of spreadsheet-based models
5. Ensure non-proliferation of special-purpose languages
6. Define Standard DSPML Model Documentation
7. Ensure that Business Units meet their modeling responsibilities
8. Build and maintain, with strict authorization security, a DSPML-wide Model Library including records of models (with version identification), model-dependant products, model review documentation and regulatory approval as well as documentation.
11. Perform re-valuations of certain trades
12. Identify inaccuracies or lack of sufficient sophistication in models, inappropriate use of models or other model risks which might require model-risk trading limits/reserves.
13. Establish procedures governing significant model changes, refinements or material updates that necessitate new model review/testing by Risk Management
15. Maintain/document a program for Stress Testing Model Algorithms to:
   a. Show evidence that the appropriate full spectrum of worst-case events (i.e. the greatest losses due to the model algorithm) has been identified
   b. Determine the assumptions underlying model valuation and the circumstances of these assumptions breaking down
   c. Analyze unexplained P&L exceptions linked to model failure
   d. Verify that models work properly over the appropriate full range of input parameters
   e. Quantify in certain cases the efficiency of Business Units’ hedging strategies
   f. Test model performance, especially in times of assumption failure or high volatility
16. Use P&L explanation to review model performance
17. Revisit/test model assumptions periodically to ensure continued validity and appropriateness
18. Set model risk limits, if appropriate and required.
19. Set model risk reserves, if appropriate and required.
20. Require Business Units, where unacceptable model vulnerability is revealed, to take steps to manage the risk of these circumstances

II. Governing Rules
1. The quality of input market, trade, counterparty name, client name or issuer name data is not usually reviewed
2. It is the models as actually used by marketing / trading / risk management / P&L calculation/reporting that are to be tested/reviewed.

3. In practice, a reasonable tradeoff between sophistication and practicality is appropriate. Where Risk Management determines that a model is inadequate for its intended purposes, consultation with the Business Unit will result in a timetable for model improvement.

4. Any product that raises a new model issue, is not already explicitly within the trading book’s mandate or significantly increases size/risk may require Risk Management review and may result in specific new model-risk trading limits and reserves.

5. Regulatory Reporting is to be advised of changes to models or their usage as required.

6. Spreadsheet-based valuation/risk models will be held to the same standards as those on more sophisticated platforms.

7. Certain products will be dealt with on a case-by-case basis. These include products:
   a. for which no reviewed model exists
   b. for which a reviewed model exists, but where market/trading conditions make the model inapplicable.
   c. which raise industry-unresolved mathematical-finance questions

3. Model Risk Responsibilities of Business Units

   A. Business Unit is responsible for organizing sufficient quantitative and technological support to maintain its own Models - especially for all products modeled / risk managed on spreadsheets - and ensuring that procedures are put into place to:
      1. Maintain a complete and updated inventory and frozen copies of models (including source code and version identification) used for valuation and risk management
      2. Maintain complete model documentation.
      3. Notify Risk Management and Product Control (Finance/Treasury & Operations) of changes to models used for P&L calculations/risk management or to the model library
      4. Cooperate with Risk Management in ensuring model consistency throughout DSPML
      5. Publish (with their own strict authorization security) certain detail and a summary of the current model library contents and documentation in the Risk Management Model Library with its pre-specified format

   B. Before a mathematical model is used for official Books and Records or for external reporting, it is the responsibility of the Business Unit to:
      1. Ensure that the model is:
         a. within the Business Unit’s mandated universe of products
         b. reviewed by Risk Management
         c. live-tested for a reasonable period
         d. consistent with any significant developments/maturing of a market
         e. included in the Business Unit model library
         f. documented as required by Risk Management policy
         g. linked explicitly to relevant trade identification numbers
         h. integrated into day-to-day risk management/control/reporting systems
         i. handled with sufficient technical expertise
         j. secured against unauthorized/unapproved change
      2. Approve the model for the Business Unit’s own official Books and Records management information and internal/external reporting
      3. Ensure that the model is Stress Tested to:
         a. Show evidence that the appropriate full spectrum of worst-case events (i.e. the greatest losses for the portfolio) has been identified
         b. Test the continued validity of model assumptions
         c. Verify that the model works properly over the full range of possible input data
         d. Test model performance, especially in times of assumption failure or high volatility
      4. Ensure that it has the capacity to value a specified test portfolio
5. Cooperate in programs of Stress Testing Model Algorithms, Stress Testing Model Input Data and
P&L Explanation. Where unacceptable vulnerability is revealed, the Business Unit will take steps to
model/manage the risk of these circumstances.

6. Ensure that appropriate model risk limits and reserves are established and linked to trades

7. Justify in writing reasons for using different models for similar products within the Business Unit.

8. Ensure non-preponderance of spreadsheet-based model.

9. Ensure non-proliferation of special-purpose languages.

10. Ensure that spreadsheet-based models are transferred to a more sophisticated, secure and
controlled platform once the businesses using them are firmly established.

11. Ensure that models for new products are reviewed by Risk Management with adequate time
allowed before New Products Committee meetings

C. Before releasing a model or its specification, documentation, etc., to a non-DSPML third party
a. It must be tested and reviewed by Risk Management
b. Each proposed distribution must be approved in advance by the Head of Debt or Equity Markets or
one of their direct reports, by Risk Management and by Law & Compliance
c. The proposed recipient of the model must execute an agreement approved by Law & Compliance
governing that party’s usage of the model or other model related materials

4. Model Risk Responsibilities of Product Control
Product control refers to Finance, Operations, Technology and Corporate Audit.

I. Models Used for P&L/Risk Calculations and Reporting
Before using a mathematical valuation/risk model for official Books and Records management
information or for external reporting.
1. The model must be:
   a. Secure against unauthorized/unapproved change
   b. Reconciled with the appropriate model version number in the Business Unit’s model library

2. Mark-to-market/parameter/risk calculations for all model-dependent positions are to be materially
accurate, in line with best market practices and operated with integrity in a well-controlled
environment. This includes periodic updating and independent review of all data inputs (e.g.
market, trade, counterparty, client or issuer name) used by models.

3. A complete set of frozen copies of models used for valuation/risk/reporting is to be maintained.

4. Secure duplicate copies of all models/systems are to be maintained with automatic computational
backup in case originals are corrupted – especially for those products modeled/risk managed on
spreadsheets.

5. Model change and version control procedures, including a periodic change report for Business Units’
model libraries, are to be developed.

II. Stress Testing Model Input Data
A program of stress testing of historical/hypothetical mark-to-market input data into models is to be
maintained/document ed which:
1. Shows evidence that the appropriate full spectrum of worst-case events (i.e. the input data which
causes the greatest losses for the portfolio) has been identified
2. Is reviewed by Risk Management
III. P&L Explanation
Where models are used to calculate P&L, a program of P&L explanation is to be maintained/ documented which:

1. Compares P&L forecast with actual P&L outcome excluding material non-market elements
2. Analyzes P&L by material source at the level of the whole portfolio as well as individual books which contribute to P&L or risk.
3. Explains a high percentage of the material historical price variation of the portfolio over a complete business/product cycle.
4. Reconciles model change history to P&L history.
5. Provides 12 months’ daily history - as well as monthly history over the life of the trade - of P&L Explanation to detect trends and prove a track record of measuring risk.
7. Analyzes unexplained P&L exceptions with respect to model input data problems.
8. Is reviewed by Risk Management. A significant level of unexplained P&L or an unusual pattern of exception attribution may indicate that the valuation process is flawed and requires review/change.
L. CREDIT POLICY

1. Introduction

DSPML's investment banking, origination, trading, sales and private client activities involve the
assumption of many risks. One of the most important is the credit risk of individual obligors, which,
under unfavorable economic, financial and/or operating conditions, could result in the temporary
interruption of contractual payment streams or a more permanent and serious payment default.

DSPML has established a credit function within Risk Management to protect itself from the risk of
credit loss. We shall define it as Credit Risk Management (CRM) in this part of the document as
Market Risk is also housed within this Group but is governed by Market Risk Policies. The Risk
Management Group develops and implements basic credit standards, assesses credit quality,
establishes appropriate limits, approves or rejects client risks, and monitors credit exposure after
transaction execution.

This Credit Policy Section of the Risk Management Policy defines the methods by which the Risk
Management assesses and controls credit risk. Its purpose is as follows:

a. to serve as an instructional guide to the credit review process;
b. to serve as a guide to the responsibilities and operating procedures of Risk Management;
c. to enable DSPML to refine its credit techniques to assure minimum risk of credit loss, and;
d. to ensure compliance with established credit policies.

2. Organization, Responsibilities and Authority Levels

This unit, under the direction of a Vice President, is responsible for the development of credit policies,
procedures and risk measurement methodologies.

CRM works with the BUs to understand transactions, to develop workable policies, approval and
reporting procedures, and to determine appropriate reserve levels. It also acts as liaison to other
Corporate Functions such as Treasury, Finance, Operations and Audit.

CRM will develop and maintain systems to track credit exposures within various departments, groups
and products. The systems contain counterparty details and transaction information such as mark-
to-market values, potential risk estimates, settlement exposure, issuer risk, maturities and principal
amounts, of all transactions executed. It is the primary tool used by RMG to monitor credit risk at the
counterparty level, at a subsidiary level, or at the individual product level.

3. Credit Policy Purpose and Scope

The purpose of this credit policy is to protect DSPML against credit losses arising from:

a. Direct credit risk: the risk that a counterparty will fail to perform on a contractual obligation.
   This could result in a loss of loan interest, principal or mark-to-market of a financing, forward,
   foreign exchange or derivative transaction;
b. Inventory risk: the risk that security value will diminish due to credit impairment of the issuer,
   and;
c. Contingent risk: the potential liability resulting from the deterioration of an issuer who has
   sold securities through DSPML.

This policy encompasses direct, inventory and contingent risk related to loans, investments, contracts,
guarantees, commitments, inventory and underwriting.

4. Establishment of Credit Policy

Each BU is responsible for adhering to this credit policy. Responsibility for credit loss rests with the
applicable BU.

The credit policy shall contain the following:
a. a description of the transactions covered by the policy and an evaluation of the credit risks involved. As new products evolve, this section of the Policy will be amended to capture credit risk arising out of the new products;
b. credit quality and maturity guidelines for credit exposures;
c. procedures for processing credit requests and documenting approvals;
d. standards for margin or collateral, if necessary;
e. procedures establishing accurate and timely reporting of credit exposures, and;
f. a methodology for calculating credit reserve levels.

The Executive Committee shall review and approve all credit policies on the recommendation of the Head of Risk Management.

The Risk Management shall maintain documentation of this Policy and monitor compliance and non-compliance with this Policy.

5. Credit Responsibilities

The Risk Management is responsible for the analysis of counterparties, and for establishing counterparty, group, industry concentration or product limits for credit exposure.

Risk Management shall apportion credit exposure limits amongst Divisions, Business Units and trading desks.

The Risk Manager shall establish prudent approval authorities within Credit, establish a Risk Oversight Committee to permit wider dissemination of credit decisions, and delegate approval authority for specific transactions to the Business Units.

The Risk Manager shall maintain a system which records limit information, capture current transaction or inventory detail and aggregates credit exposure across all entities of the counterparties.

The Risk Manager shall monitor DSPML's credit exposure, address risk concentrations for counterparties, and industries on a periodic basis, and report to the Executive Committee.

Risk Management shall develop standards for reserves in coordination with the Chief Financial Officer (CFO), Treasurer and the Executive Committee.

The Head of Risk Management shall make recommendations to the Executive Committee regarding credit matters of such significance that they require review or approval by the Executive Committee.

6. Credit Approval/ Monitoring

This section outlines the major processes to be used in approving, rejecting, and monitoring credit risks. It must be noted that each type of credit risk, each industry, and each individual customer is unique. The information collected, ratios used, reports written, methods of analysis, etc., are determined by Credit Risk Management, using the procedures defined in this section as a guide rather than as rigid requirements.

   a. Responsibilities of Credit Risk Management:

CRM is responsible for appraising the credit worthiness of the client and the client's industry, for establishing appropriate credit limits for product specific exposures, for making proper records and notifications of the approvals and limits, for monitoring the creditworthiness of the client, and for scheduling periodic credit reviews.

Within this framework, CRM is responsible for six major functions:

1. New Accounts - Investigate, analyze, and approve or reject prospective new customers, set and document limits, and where appropriate, submit written appraisals for subsequent approval by Risk Manager or the Executive Committee, should the product risk and size of the requested limit warrant such approval.
2. Existing Accounts - Evaluate and approve or reject requested changes in credit limits which have been set for existing client/customers. Review would normally include financial statement analysis and management evaluation and may, at the CRM's discretion, based on the product risk involved, incorporate customer contacts, visits, financial statement analysis, bank line or documentation checks, and other credit evaluations.

3. Industry/Market Review - As part of the continuous credit review process, develop direct personal contacts with industry associations, banks, credit agencies, DSPML trading desks and/or origination units, etc. These contacts will allow CRM to keep up-to-date on significant industry trends and market developments. Periodic industry-wide statistical analyses may be an important part of this review process.

4. Report Limits and Approvals - Note all credit actions taken in a credit file. Maintain approved credits with position, outstanding, and exposure limits on the system.

5. Overages - Continuously monitor DSPML's actual positions and exposures, and investigate overages of approved credit limits. Take appropriate action which may include reporting such overages to the appropriate management level.

b. Credit Analysis and Presentation:
The CRM's role is to investigate and evaluate the credit worthiness of each new or existing client, consider the risk levels inherent in the products involved, and make a judgment about whether to approve (or recommend approval) or reject the risk. Depending on the level of product risk involved, CRM may judge it appropriate to prepare a written report which documents the data considered, the analysis performed, and the action taken. As part of the analysis process, CRM will assign a DSPML credit quality rating indicating the relative creditworthiness of a specific client as compared to its industry and all clients as a group. CRM will not rate private, individual or equity brokerage clients.

c. DSPML's Credit Rating System:
In the credit approval process for a prospective or existing client, the analyst is expected to evaluate the individual credit strength of the client and rank it against its industry group. For credit standards and product approvals to be applied consistently, a centralized credit quality ranking system must be an integral part of the credit analysis process.

Credit ratings are continuously reviewed and adjusted thereafter as part of the account maintenance process. Ratings measure overall relative credit quality, comparing a specific client/customer against the appropriate industry group. As each industry group has unique characteristics, different ratios and key factors need to be used in establishing standards for such measurement. Most industry rating assessments incorporate the following:

1. Market position and/or size
2. Capital structure, leverage
3. Financial stability, profitability
4. Fixed charge coverage, cash generation
5. Access to financing sources
6. Management
7. Operating efficiency
8. Capital spending requirements

Credit quality ratings for each industry are assigned on a numerical scale ranging from 1 through 9 for acceptable credit risks and 10 for unacceptable risks. See Addendum IV for the equivalence of DSPML Credit ratings to those of CRISIL's and ICRA. It is the responsibility of CRM to develop industry specific standards and to assure consistent application of ratings. Such standards are to be guided by the following scale:

<table>
<thead>
<tr>
<th>Rating</th>
<th>Definition</th>
<th>Quality Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Excellent</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Very best quality within industry group</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Negligible degree of credit risk or any product</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- All significant factors at our near top of industry standards</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Frequently among largest members of industry group</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Strong</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Superior quality member of industry group</td>
<td></td>
</tr>
</tbody>
</table>
- Negligible degree of credit risk for any product
- Significant factors slightly below top of industry standards

3 Very Good
- Credit quality very high compared to industry averages
- Key ratios and factors are well above industry averages
- Generally acceptable for all products and maturity ranges

4 Above Average
- Credit quality judged better than average for this industry
- Key factors and ratios at or slightly above industry averages

5 Average
- Average quality credit risk for this industry
- Generally most key ratios are at or near median levels
- Generally acceptable for most products within normal maturity ranges

6 Below Average
- Credit quality judged below average for this industry
- Most key credit factors near or slightly below average levels

7 Weak
- Credit quality is considered weak compared to industry
- Significant credit factors are well below industry averages
- Not generally acceptable for products with higher risk characteristics

8 Marginal
- Credit quality judged poor by industry standards
- Key factors and ratios are far below industry norms
- Usually requires security, outside support, or very short maturities for product approval

9 Poor
- Extremely weak credit risk by industry standards
- Key factors and ratios at or near bottom of industry
- Product approval considered only with strong outside support, or excess security

10 Unacceptable
- Judged to be an unacceptable credit risk
- "No Business" account
- May not be approved for any products

d. Credit Approval Authority Level:
The ability of CRM to approve or reject a credit risk depends on the quality of the counterparty, the product involved, the risk adjusted exposure (RAEX) and the amount of limit requested. The methodology and model for calculating RAEX for each product and counterparty shall be developed by Risk Management, going forward.

Where the credit risk under consideration for a new or existing client is high, in the judgement of the Head of Risk Management, the matter may be referred to the Risk Oversight Committee or the Executive Committee, along with recommendations for approval or rejection, limits suggested, or other suggested action.

It is the responsibility of the transactor to provide CRM with all relevant materials under consideration. It should be noted that Risk Management is deemed to be inside the wall and therefore entitled to all non-public information.

In the absence of the CRM, the CFO or CAO may approve credit risk exposures. In each of these cases, the transactor will document the request for and approval or the risk exposures.

e. Recording Credit Approvals/Rejections:
When a credit decision has been made or a credit action taken, appropriate parties must be notified and credit records must be updated.
In addition to the notification of interested parties, CRM is also responsible for recording the credit approval, rejection, limit change, etc. on the system (eg. IDMMS) used by DSPML and in the credit file, if appropriate.

1. The credit action may be noted in the credit file, specifying date, amount, type and authorizing person as well as other pertinent data.
2. The system must be updated to properly record the credit action taken.
3. For some products, additional record updates may be necessary such as preparation of periodic lists of approved accounts, preparation of reports, etc., and these are also CRM's responsibility.

**f. Credit Violations:**

Violations, which occur when traders or transactor exceed limits or violate policy set by CRM, are managed according to the severity and frequency of the occurrence.

CRM would in general follow the procedures prescribed below, but specific instances should be handled according to the Risk Manager's discretion.

A violation occurs when either a trade is done (a) without approval, (b) with no limit in place or (c) when the exposure with counterparty exceeds the stated limit.

Violations of the first two types are considered serious and are dealt with as described below. The third type, while also serious, may be resolved, depending upon the counterparty and the circumstances of the violation, by using the procedures below or by raising the counterparty's limit.

The violation process begins when a CRM notes a violation and confirms that it is not a systems-related overage (see below). For the first occurrence of a violation by a specific transactor, CRM will inform the transactor of the overage, requesting that the situation be remedied. Second and subsequent occurrences will result in CRM sending a memo, to the transactor and the transactor's Manager. Calls should be made and memos sent out in a timely manner.

CRM will also monitor whether transactors are incurring violations across counterparties and shall periodically keep the Risk Oversight Committee advised of the violations.

**g. Credit System Overages:**

The system compares exposure to limits, on-line by product for each counterparty. The system automatically flags overages (excesses or violations) and makes them available to CRM. CRM is responsible for the timely resolution of all overages, and for the immediate resolution of overages defined as “high risk.”

System-caused overages shall be tracked by CRM and shall be resolved on a permanent basis by having the relevant systems modified.

**h. Monitoring Credit Quality:**

CRM is responsible for the continuous credit surveillance of their clients. This ongoing function requires CRM to:

a. determine on a continuous basis that the credit quality of the customer justifies the approvals given and limits set;
b. maintain an open and current credit file on each customer;
c. collect and review annual and interim financial statements as appropriate;
d. follow news releases, rating agency and research materials, regulatory reports, etc.;
e. track economic and industry trends, and where applicable, participate in industry or trade group associations;
f. maintain contact with the financial management of customer where appropriate;
g. monitor the level of and trends in positions, outstandings, and credit exposures in order to determine that the client's trading is both within the confines of credit approvals and limits and to recognize unusual market activity which may be an indicator of operating difficulties, and;
h. be alert to problems that might warrant corrective action on approvals or limits.
i. **Periodic Credit Review:**

After approval of a credit risk and establishment of credit risk, trading and position limits, CRM must establish a review date for the limit and approval. The timing of the first scheduled follow-up review and the subsequent regular review cycle, usually once a year, is a function of the risk levels of the products involved and the credit quality of the client.

During a follow-up review, which is similar to the initial review process, CRM must obtain current financial statements as well as any additional data needed such as recent market activity, perform credit analysis, and possibly discuss performance with the client's senior management.

CRM will then determine a course of action, such as continuation, increase or decrease in existing approvals and limits. The analyst must document such action in the client's credit file, update the information in the system and include the results of the review in a Credit Report. In addition, CRM must notify the relevant BU Head of the course of action.

7. **Credit Problem Identification**

BU's are responsible for identifying and promptly reporting potential credit problems to RMG involving the occurrence of any of the following events:

(i) default in payment or settlement (including failure to satisfy margin calls or other similar obligations to provide additional collateral) past the original due date or settlement date;

(ii) decline in the value of collateral held by or pledged to DSPML which creates or results in an increase in the uncollateralized exposure to such counterparty;

(iii) decline of 25% or more in the value of any investment DSPML maintains in a company;

(iv) decline in the credit rating of the counterparty;

(v) requests for modifications of the terms of the original credit or investment resulting in additional risk of loss to DSPML which may include (a) deferring a required payment, (b) releasing or exchanging collateral held by or pledged to DSPML for collateral of a different value, instrument or liquidity, (c) lowering the priority of any DSPML claim or interest (e.g., exchanging debt for equity or proposing to subordinate DSPML claims to the claims of other creditors) or (d) requests for refinancing, additional extensions of credit or any other additional investment resulting in additional credit risk to DSPML;

(vi) bankruptcy, insolvency, liquidation or other similar reorganization of a client or counterparty in which DSPML does business, including without limitation, any declaration by the client or counterparty of a moratorium on payments to any creditors;

(vii) the establishment (or increase) of a specific reserve established for a credit problem or the write-down against a general reserve relating to a credit problem or investment; or

(viii) any other material adverse change in the financial condition, operations, assets or business if the client or counterparty or company in which DSPML has invested (including, where appropriate, exchange rate or currency convertibility restrictions) such that the original source of repayment (e.g., free cash flow, asset sales or anticipated issuance of securities) is no longer likely to be available to satisfy its obligations to DSPML or DSPML's ability to exercise its rights and remedies are otherwise materially impaired.
M. PROCESS RISK POLICY

1. Establishment of Process Risk Policy

In order to control process risk effectively, a formalized policy is necessary to monitor, measure, and manage these risks. Both BUs and Finance are critical to ensure objective reporting, timely analysis, and meaningful follow-up. To effectively monitor process risk, all BUs must begin to develop programs that allow them to identify process risk losses incurred over a reporting period. Direct losses stemming from process risk should be rolled up into a general ledger account.

2. Goals for Process Risk

a. Reduce losses resulting from Process Risk
b. Establish risk management policies and procedures for identifying, measuring, monitoring and managing Process Risks, at the BU and corporate level.
c. Embed Process Risk Management responsibilities within each BU and support function
d. Integrate Process Risk measures with DSPML's Equity Assignment process

3. Governance Structure

a. BU Line Management has primary responsibility and accountability for identifying, assessing and managing Process Risks.
b. RMG is responsible for establishing a firm-wide Process Risk Management Framework, setting policies and standards for managing Process Risks, ensuring consistency in approach across all business units and fostering best practices.
c. Risk Oversight Committee will monitor the firm's progress with implementing the Process Risk Management Framework, facilitate cross-communication among business lines and provide another mechanism for escalating issues to senior management.


a. Ensures a consistent, disciplined approach across the firm to identify the type, causes, and cost of process errors.
b. Creates a first critical step toward managing Process Risk proactively.
c. Leads ultimately to cost savings and revenue enhancement opportunities.
d. Provides tangible evidence of a formalized Process Risk Management monitoring program to regulators and rating agencies.
e. Demonstrates DSPML's commitment to good corporate governance

5. Key Elements

Each BU process risk program will include these elements:

I. Identification and Measurement
   a. Consistent and comprehensive reporting of all process risk related losses
   b. Categorization and documentation of all process risk loss events
   c. Establishment of Process Risk Factors
   d. Self-identification of key Process Risk by business and support area
   e. Quantification of Process Risk related capital

II. Monitoring
   a. Track process risk loss events and corrective action plans
   b. Assess Process Risk loss trends
   c. Review Risk indicators
   d. Track Process improvement initiatives

III. Management
   a. Assign accountability - establish process risk management roles and responsibilities
   b. Establish process improvement benchmarks (e.g. Best Practices)
   c. Integrate Process Risk Management into business management activities and responsibilities
N. ADDENDUM
I. DSPML RISK MANAGEMENT STRUCTURE

![Risk Management Structure Diagram]
II. DEBT TRADING LIMITS

The following limits will be applied for the Debt Trading portfolio. These apply to both the Credit
Trading Portfolio and the G-Sec Portfolio. The limits cover both Market and Credit risk.

Portfolio Face Value Limit:
The Portfolio Face Value Limit (PFVL) is a primary market risk limit, aimed at capping the overall size
of the debt trading portfolios by the aggregated face value at any given point (i.e., both intra-day and
overnight). The total face value represents the exposure to the overall face value. The Debt trading
portfolio will be capped to the extent of a number representing its face value and applies to face value
aggregated across all debt sub-portfolios. This includes the T-bill portfolio, credit trading portfolio, the
commercial paper and other portfolios.

This limit is set at the beginning of each financial year and recommended by the desk head, with the
concurrency of the Risk Manager, CFO and the Executive Committee. The limit is effective only on the
written approval of the APR-Market Risk Head.

Business may at their discretion cap individual sub-portfolios at the desk levels to enhance
management of various portfolios.

Portfolio One-Year-Equivalent (OYE):
In the absence of a VAR model, OYE is the primary tool for effective control of the portfolio. OYE is a
second-order differential measuring holdings as a function of duration of a portfolio. This limit too, is
set at the beginning of each financial year and recommended by the desk head, with the concurrency
of the Risk Manager, CFO and the Executive Committee. The limit is effective only on the written
approval of the APR-Market Risk Head.

Loss Action Trigger:
Here we would like to introduce the concept of a Loss Action Trigger (LAT). LAT essentially reflects
the management’s tolerance for loss at a portfolio level. In other words it represents a portfolio level
loss threshold at which the next level of management is informed (at least one level above both
Trading desk Head and Risk Manager). Once informed, the next level of management will decide on
an action plan to mitigate the loss, which will be implemented by the trading desk.

LAT is calculated as the daily cumulative profit or loss of the portfolio during a calendar month. LAT is
not to be implemented for a single security but for a portfolio or groups of portfolios.

The debt-trading desk will have a LAT limit for each portfolio, i.e., G-Sec portfolio, corporate debt
portfolio, swap portfolio, etc. LAT limits are set at the beginning of each financial year and
recommended by the desk head, with the concurrency of the Risk Manager, CFO and the Executive
Committee. The limit is effective only on the written approval of the APR-Market Risk Head.

Counterparty Settlement Limit:
Almost all debt market trades are routed through RBI’s SGL. This being a dematerialized DVP system,
settlement risks low. The SGL system works along with a cash-account with the RBI. The system
debits or credits the Cash Account while passing opposite entries in the securities ledger account.
Banks are required to keep minimum balances as part of their cash reserve requirement. This CRR is
a function of their deposit base. Thus the likelihood of a failed settlement due to lack of cash is
remote, unless the deal size is larger than the cash balance in the account.

Primary dealers and other debt market players however, do not have a minimum cash requirement,
raising the likelihood of a failed settlement. Thus, we will monitor settlement exposure (SE) through
limits based on the quality of the counterparty, size of the counterpart’s balance sheet, the size of the
trade. Limits will be assigned to all counterparties.

Physical trades will only be done on the basis of delivery-after-payment (DAP) for sell transactions and
payment-after-delivery (PAD) for buy transactions this effectively extinguishes our SE. In certain
markets, for instance debt markets, physical buy transaction will incur SE, as counterparties do not release certificates unless payment is received. As a business practice, transactors will refrain from executing such deals, except with the pre-approval of CRM.

Due to restriction on forward trading and short selling in the bond market, pre-settlement exposure is non-existent. However, new products such as interest rate swaps and interest rate options will necessitate limits on PSE. These exposures and methodology will be defined in the relevant NPR.

Inventory Limit:
Inventory or Issuer risk is the risk that the market value of a security or other debt instrument will fall when the perceived or actual creditworthiness of the issuer changes. The risk manager will set issuer limits to each counterparty based on an analysis of the firm set forth in Section L-6 above.

Group Concentration Limit
RMG will prescribe Group Concentration Limits on credit and inventory risk as a prudent credit concentration norm. Under this limit, inventory exposure to any particular group or family of firms will be capped. The Risk Manager will allocate Group Concentration as a percentage of DSPML’s net worth. This limit will be reviewed quarterly.
III. EQUITY TRADING LIMITS

The following limits will be applied for the Equity Trading portfolio.

**Portfolio Market Value Limit:**
The Portfolio Market Value Limit (PMVL) is a primary market risk limit, aimed at capping the overall size of the equity trading portfolio by its aggregated market value at any given point (i.e., both intra-day and overnight). This limit is set at the beginning of each financial year and recommended by the desk head, with the concurrence of the Risk Manager, CFO and the Executive Committee. The limit is effective only on the written approval of the APR-Market Risk Head.

**Loss Action Trigger:**
As with the debt portfolio, we would like to introduce the concept of a Loss Action Trigger (LAT) to the equity portfolio too. LAT essentially reflects the management’s tolerance for loss at a portfolio level. In other words it represents a portfolio level loss threshold at which the next level of management is informed (at least one level above both Trading desk Head and Risk Manager). Once informed, the next level of management will decide on an action plan to mitigate the loss, which will be implemented by the trading desk.

LAT is calculated as the daily cumulative profit or loss of the portfolio during a calendar month. LAT is not to be implemented for a single security but for a portfolio or groups of portfolios at the desk level.

**Industry/Sector Concentration Limit**
The Risk Manager or Business Manager may at their judgement set industry or sector concentration limits, capping exposure to a particular industry or sector or group of firms. At each instance, the proposer will document the rationale for such a limit and circulate it to the Business/Risk management and APR-Risk Management head for approval.
### IV. DSPML CREDIT RATINGS EQUIVALENCE SCALES

<table>
<thead>
<tr>
<th>Grades</th>
<th>Investment Grade</th>
<th>Non-Investment or Speculative Grades</th>
</tr>
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<tr>
<td>Grades</td>
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<td>Short Term</td>
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<td>P-5 A5 P-5</td>
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</tbody>
</table>

**NOTES:**

1. CIS = Collective Investment Schemes

2. CRISIL ratings carry the following suffixes: (so) = structured obligations and (fso) = foreign structured obligations. Fixed deposit programs follow the same ratings are long-term obligations but carry the prefix ‘F’. Under column [Funds or CIS], the lower case ‘f’ denotes Mutual Funds.

3. ICRA ratings carry the prefix ‘L’ denoting Long-term obligations or ‘M’ for Medium-term obligations

4. CARE ratings carry following suffixes: FD = Fixed deposit; CD = Certificate of Deposit; SO = Structured Obligation; CPS = Convertible Preference Shares; RPS = Redeemable Preference Shares. Short-term CARE ratings carry an ‘R’ following the P to denote tradable instruments and ‘L’ for loans

5. NB = ‘No Business’ can be conducted with clients rated NB.