UNDERSTANDING RISK MANAGEMENT:
AN OVERVIEW

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Director of Insurance and Risk Management

5/2013
What is Risk Management?

- Risk Management is a defined set of coordinated activities to direct and control an organization with regard to risk.

- Risk Management allows an organization to identify risk mitigation strategies so the organization can achieve its goals.
Principles of Risk Management

- Risk Management creates and protects value.
- Risk Management is an integral part of all organizational processes.
- Risk Management is part of decision making.
- Risk Management takes human and cultural factors into account.
Principles of Risk Management

- Risk Management is systematic, structured and timely.
- Risk Management is based on the best available information.
- Risk Management is transparent and inclusive.
- Risk Management facilitates continual improvement of the organization.
Design of framework for managing risk
- Understanding the organization and its context
- Establishing risk management policy
- Accountability
- Integration into organizational processes
- Resources
- Establishing internal communication and reporting mechanisms
- Establishing external communication and reporting mechanisms

Mandate and commitment

Continual improvement of the framework

Implementing risk management
- Implementing the framework for managing risk
- Implementing the risk management process

Monitoring and review of the framework
Integration into the Organizational Processes

- Risk management should be embedded in all the organization's practices and processes in a way that it is relevant, effective and efficient.

- The risk management process should become part of, and not separate from, those organizational processes.

- In particular, risk management should be embedded into the policy development, business and strategic planning and review, and change management processes.
The challenge is to address cross functional and forward looking “horizon” risks.
Components of the Enterprise Risk Management Program

- Support from the Senior Management Team
- Implement Risk Management in the Organization
- Define the risk criteria
- Risk identification
- Risk Analysis
- Risk Treatment
- Monitoring and Review
Principles for managing risk

- a) Creates values
- b) Integral part of organizational processes
- c) Part of decision making
- d) Explicitly addresses uncertainty
- e) Systematic, structured and timely
- f) Based on the best available information
- g) Tailored
- h) Takes human and cultural factors into account
- i) Transplant and inclusive
- j) Dynamic, iterative and responsive to change
- k) Facilitates continual improvement and enhancement of the organization

Framework for managing risk

- Mandate and Commitment
- Design of framework for managing risk
- Implementing risk Management
- Continual improvement of the Framework
- Monitoring and review of the Framework
- Monitoring and review of the Framework

Process for managing risk

- Establishing the context
- Risk assessment
- Risk identification
- Risk analysis
- Risk evaluation
- Risk treatment
# Risk Assessment Tool and Metrics

## Risk Assessment Tool and Metrics

<table>
<thead>
<tr>
<th>Executive Owner</th>
<th>Risk Owner</th>
<th>Risk Owner Dept</th>
<th>Risk Name</th>
<th>Risk Description</th>
<th>Expected Residual or Current Impact</th>
<th>Expected Residual or Current Likelihood</th>
<th>Risk Velocity</th>
<th>Management Preparedness</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
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</tbody>
</table>

### Expected Residual or Current Impact

If this risk were to occur, what would be the impact to your operations (health & safety, financial, operations, legal, reputation).

<table>
<thead>
<tr>
<th>Score</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Low</td>
</tr>
<tr>
<td>2</td>
<td>Low to Medium</td>
</tr>
<tr>
<td>3</td>
<td>Medium</td>
</tr>
<tr>
<td>4</td>
<td>Medium to High</td>
</tr>
<tr>
<td>5</td>
<td>High</td>
</tr>
</tbody>
</table>

### Risk Velocity (Speed to Onset)

If this risk were to occur, how long before it would have an impact.

<table>
<thead>
<tr>
<th>Score</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Very Slow</td>
</tr>
<tr>
<td>2</td>
<td>Slow</td>
</tr>
<tr>
<td>3</td>
<td>Moderate</td>
</tr>
<tr>
<td>4</td>
<td>Fast</td>
</tr>
<tr>
<td>5</td>
<td>Immediate</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Score</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>The effect of this risk on operations occurs only after 12 months.</td>
</tr>
<tr>
<td>2</td>
<td>The effect of this risk on operations occurs within 6-12 months.</td>
</tr>
<tr>
<td>3</td>
<td>The effect of this risk on operations occurs within 3-6 months.</td>
</tr>
<tr>
<td>4</td>
<td>The effect of this risk on operations occurs within 1-3 months.</td>
</tr>
<tr>
<td>5</td>
<td>The effect of this risk on operations occurs within 30 days.</td>
</tr>
</tbody>
</table>

### Expected Residual or Current Likelihood

The likelihood of a risk occurring under current conditions within the next 18 months.

<table>
<thead>
<tr>
<th>Score</th>
<th>Description</th>
<th>Likelihood</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Low</td>
<td>0 - 10% chance of occurring</td>
</tr>
<tr>
<td>2</td>
<td>Low to Medium</td>
<td>10 - 30% chance of occurring</td>
</tr>
<tr>
<td>3</td>
<td>Medium</td>
<td>30 - 70% chance of occurring</td>
</tr>
<tr>
<td>4</td>
<td>Medium to High</td>
<td>70 - 90% chance of occurring</td>
</tr>
<tr>
<td>5</td>
<td>High</td>
<td>90 - 100% chance of occurring</td>
</tr>
</tbody>
</table>

### Management Preparedness

If this risk were to occur, how prepared would we be (upper management awareness/assessment/oversight, controls in place to detect and prevent the risk).

<table>
<thead>
<tr>
<th>Score</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>None</td>
</tr>
<tr>
<td>2</td>
<td>Weak</td>
</tr>
<tr>
<td>3</td>
<td>Moderate</td>
</tr>
<tr>
<td>4</td>
<td>Strong</td>
</tr>
<tr>
<td>5</td>
<td>Very Strong</td>
</tr>
</tbody>
</table>
Risk Score

• Current Risk: What the Risk level is under current controls.

• Risk Score is calculated by using the following values and formulas.

• Assuming the controls that are in place work as expected.
SUB-RISKS RISK OUTCOMES

Causes the Risk to occur The results if the risk occurs

Example:

**Human Error Risk**
Driver inattention, distraction

**Weather Risk**
Icy conditions, flooding

**Mechanical Risk**
Brake fails, stuck accelerator

**Financial Loss Risk**
Possible litigation, increased insurance premiums

**Health & Safety Risk**
Injury, loss of life

**Property Damage Risk**
Surrounding environment, vehicles

**RISK:** Multi-vehicle accident