



**Property and Casualty Insurance
Compensation Corporation**

**Société d'indemnisation en matière
d'assurances IARD**

Toward a Risk Management Framework for PACICC

December 2007

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Executive Summary

This issues paper examines the practice of enterprise risk management (ERM) and summarizes PACICC's approach to managing its business risks and opportunities.

As the guarantee fund for Canada's P&C insurance industry, PACICC ensures public confidence in a competitive P&C insurance industry. It is therefore critical that PACICC demonstrate prudence, awareness and foresight in dealing with both industry and organizational risks. In the absence of a systematic approach to risk management, PACICC could incur significant liabilities in responding to the covered claims of policyholders of one or more member P&C insurance company.

The paper examines the development of comprehensive risk management practices and approaches. Included is a summary of perspectives of rating agencies, insurance supervisors and academics. Experts agree that those insurers employing ERM successfully will have a long-run competitive advantage over those that manage and monitor risks individually.

PACICC has developed its own risk register identifying some 35 different risks to the Corporation. Risks are ranked in urgency, depending upon the likelihood of the threat materializing and the impact it could have upon the organization. If a risk is relevant and potentially could have a high impact, it should be addressed, regardless of how remote the likelihood of its occurrence. Included in the summary of risks facing PACICC are details on the six highest-priority risks (beginning on page 12):

Highest-Priority Risks Facing PACICC	Impact / Likelihood
1. Insurance supervisory frameworks of some Canadian provinces do not meet standards recommended by the International Association of Insurance Supervisors (IAIS)	High / High
2. Federal and provincial insurance regulatory objectives may conflict	High / High
3. PACICC must clarify its preparedness, operationally, to respond to the failure of a larger member company, or to multiple, smaller-company failures	Medium / High
4. Insolvency costs could be greater than PACICC's resources	Very High / Very Low
5. Outdated insurer winding-up and restructuring practices legislation may be precluding the use of more efficient, lower-cost best practices in the winding-up of insolvent insurers in Canada	Medium / High
6. Current processes to ensure that confidential information held by PACICC is appropriately protected may require strengthening	High / Low

Detailed action plans are being developed to manage these risks, specifically where current mitigation activities are not fully addressing the risks. PACICC's Board of Directors at least annually will review the Corporation's progress in implementing action plans and will revise its risk ratings accordingly.

PACICC encourages its member companies to embrace ERM and to implement a comprehensive approach to risk management which is appropriate to their risk profile. ERM can assist firms in gaining competitive advantage in a rapidly changing business environment.

Introduction

Most businesses today face a complex array of inter-related risks and, increasingly, the success of business organizations depends on how well they anticipate and manage these risks. While it may be possible for an organization to ignore the risks it faces and still be successful, such an outcome would have more to do with good luck than good management. Being successful at risk management involves being proactive.

An effective organization must constantly seek to identify, assess, manage and monitor business opportunities. PACICC is very mindful of this fact. Risk management is as important to a non-profit guarantee fund as it is to a for-profit corporation. In the absence of a systematic approach to risk management, PACICC could incur significant liabilities in discharging its responsibilities to members – responding to the claims of policyholders under most policies issued by P&C insurance companies.

Insurance is the business of understanding, assuming and transferring risk. As such, insurers must be pre-eminent risk managers – the ability to measure risk is paramount to their success. As the guarantee fund for Canada's P&C insurance industry, PACICC ensures public confidence in a competitive P&C insurance industry. It is therefore critical that PACICC demonstrates prudence, awareness and foresight in dealing with both industry and organizational risks. Regulators, members and policyholders alike expect PACICC to employ best practices in identifying, assessing and managing risks.

This document examines the practice of enterprise risk management (ERM) and summarizes PACICC's general approach to managing its business risks and opportunities.

Background

Traditional risk management can be characterized by fragmented responsibility, rather than a holistic approach; a focus on discrete events rather than part of a larger portfolio of objectives; a perception of risk management being a product or transaction (insurance) or a reaction to events.

– Virchow, Krause & Company (*The Principles of Enterprise Risk Management*)

More and more, organizations are incorporating ERM in their annual strategic planning activities in order to gain competitive advantage in a rapidly changing business environment. While well-managed organizations have always focused on risk management to some degree, it has typically been on an exposure-by-exposure basis through various risk management silos. (William Shenkir and Paul Walker, *Implementing Enterprise Risk Management*). There is inherent danger in this compartmentalized approach to risk management activities.

The need for more systematic approaches to managing risks is growing as organizations seek to deal with business uncertainties generated by globalization, deregulation, innovation, new technology, industry restructuring and the like. Industry consolidation has narrowed the field in the automotive and telecommunications sectors, pharmaceutical and tobacco industries, finance, insurance and engineering. Many organizations in these industries have turned to ERM to help them maximize the potential benefits achieved through mergers and acquisitions.

ERM has been introduced in a number of industry sectors over the past decade to varying degrees, and with varying degrees of success. While industry-specific risks have been managed with a high degree of sophistication in the financial services sector (including P&C insurance) and energy sector, the services and consumer business sectors have employed a far less refined approach. (Deloitte & Touche, *The Risk Intelligent Enterprise: ERM Done Right*).

Enterprise Risk Management (ERM)

Risk is the potential for loss caused by an event (or series of events) that can adversely affect the achievement of a company's objectives ... The simple fact is – and this applies as equally to business as it does to emergency management – if a risk is both relevant and has extremely high impact, it should be addressed, regardless of 'remote' likelihood.

– Deloitte & Touche (*The Risk Intelligent Enterprise: ERM Done Right*)

Risk sources differ between organizations and across industries. They can stem from: industry specifics, compliance, competition, the environment, security, privacy concerns, business continuity, strategic reporting and/or operations. Sources of risk can be internal or external. These include: environmental risks (arising in the external environment), process risks (occurring internally within the organization's business processes) and informational risks (reliability of information supporting management decisions). An organization's sensitivity to risk is a function of the significance of its exposure to a future event, the likelihood of this event occurring and the organization's ability to manage the implications of such an event occurring.

Organizations are incorporating ERM in their strategic planning activities to establish the oversight, control and discipline to drive continuous improvement in their risk management capabilities. ERM advances the maturity of an organization's capabilities in managing priority risks. It repositions risk management from a discipline of avoiding or hedging bets to a differentiating skill for enhancing and protecting organizational value. To be successful, ERM must provide reasonable assurance to an organization's board, management and stakeholders that its business objectives can be achieved. ERM focuses not only on value preservation (e.g. organizational reputation, credibility, stability, etc.) but also value creation (e.g. measurable improvement in financial performance, upgrade of a company's debt/equity/risk rating, etc.).

A successful ERM plan also needs to be strategic – it must focus on dominant risks and priority opportunities. In a February 2007 risk management special report (*Enterprise Risk Management*), Susan Meltzer of Aviva Canada noted that ERM is a structured and disciplined enterprise-wide approach to managing all of the risks of the enterprise. ERM seeks to:

- Identify potential events and risk exposures affecting the organization
- Ensure consistency in risk processes, controls and approaches throughout the business
- Manage risks within an organization's comfort level, weighing probability and vulnerability (“middle-up” and “top-down” approach to risk identification and assessment)
- Provide reasonable assurance of due diligence to an organization's board, management and stakeholders
- Ensure the achievement of business objectives in separate/overlapping categories through ongoing participation at all levels and functions.

Ms. Meltzer pointed out that ERM is not a purely quantitative exercise, an internal audit exercise relating to risks and controls, nor a program that can be adopted using a “cookie cutter” approach. Organizations that manage risks to existing tangible and intangible assets and resources will be more efficient and effective, outperforming those that do not undertake such planning. PACICC’s performance is closely monitored by industry regulators and members – both parties must have confidence in PACICC’s ability to respond to policyholder claims in the event of an industry insolvency. Successful organizations are able to evaluate, accept and manage uncertainties as they seek to create sustainable value for stakeholders.

ERM can assist an organization’s management in:

- Identifying and managing risks within and outside of the organization
- Reducing operational surprises and adverse impacts
- Aligning the organization’s risk appetite and strategy
- Enhancing risk response decisions and the effective use of resources
- Providing integrated responses to multiple risk scenarios and their interaction.

Traditional risk management approaches have relied upon a fragmented decision-making process and a “negative” outlook on risk, reactive behaviour and risk-management activity that is cost-based, narrowly focused and functionally-driven. By contrast, ERM focuses on a much more integrated decision-making process and a positive outlook on risk, proactive behaviour and risk management activity that is value-based, broadly focused and process-driven. ERM dictates that organizations must tolerate some degree of risk against proscribed limits in an articulated risk appetite. ERM is a continuous process – not an ad hoc reaction to periodic developments. As well, ERM is very broadly focused, taking into account all sources of risk (not just financial risks).

Among the key benefits of elevating risk management to a strategic level are:

- **Greater efficiency** – alignment and integration of divergent views of risk management through standardized risk management principles and language
- **Fewer material surprises** – reduction in unacceptable performance variability through the prevention, detection, correction and escalation of critical risk issues
- **Planning and operational effectiveness** – enhanced confidence of the board, management and stakeholders that risks are understood and are being properly managed
- **Improved decision making, greater accountability and stronger governance** – achieved through sharing risk information and ensuring integration of risk management functions
- **Identification of opportunities** – successful response to a changing business environment by properly aligning the organization’s strategy and corporate culture.

Brian Nocco and René Stulz (*Enterprise Risk Management: Theory and Practice*) noted that firms that succeed at ERM have a long-run competitive advantage over those that manage and monitor risks individually – “*Our argument is that, by measuring and managing its risks systematically and consistently and by aligning the incentives of employees to optimize the tradeoff between risk and return, a firm increases sharply the odds that it will be able to achieve its strategic goals.*”

Evolution of ERM

A.M. Best perceives risk management as paramount to an insurer's long-term success. A.M. Best believes companies that engage in sound risk management typically are less likely to fail.

– A.M. Best Research (*Canadian Property/Casualty - 2007 Review & Preview*)

In an October 2006 research paper (*Raising the Bar – Rating Agencies: A Driving Force Behind Enterprise Risk Management*), Benfield ReMetrics observed that insurance risk has traditionally been separated and managed without due consideration of asset risk. ERM has altered this outlook with its requirement that companies treat all risks as a portfolio and manage them in a holistic manner within an integrated risk management framework. ERM cuts across traditional silos, improving both strategic and tactical decision-making. The importance of ERM grows in proportion to the complexity of risks, but is inversely proportional to the level of adequate capitalization of a firm. If it can be shown that risks are being taken in a measured way, there will be the potential to reduce regulatory capital and increase returns to shareholders. (*Aviva Canada Appoints a “Chief Pessimist”: P&C Company Embraces Enterprise Risk Management*, Barbara Aarsteinsen, Canadian Insurance, July/August 2006)

In its May 2006 *ERM Specialty Guide*, the Society of Actuaries noted, “*Generally, the appropriate risk context is that of the entire enterprise. The enterprise view is consistent with the economic decisions facing the organization. If an insurance company is able to reduce risk, it will be able to reduce capital and hence, costs. A second reason supporting the enterprise context is that it aligns with stakeholders’ perspectives. An investor in an insurance company, like an investor in a particular mutual fund, is only concerned with the risk and return of the company in total.*”

Benfield observed that the leading rating agencies (S&P, A.M. Best, Moody’s and Fitch) have been a driving force behind the development and refinement of ERM practices across industries in the United States. Large losses from natural catastrophes, terrorism, asbestos, increased volatility of the financial markets and recent corporate governance failures have all helped to raise the importance of ERM. Organizations have been prompted to develop integrated ERM frameworks and incorporate these into their day-to-day operations. Benfield notes that ERM has clearly become an important component in the financial strength ratings process.

All of the leading rating agencies have incorporated ERM into their ratings processes to some degree. Some agencies have made more explicit public statements than others with respect to ERM. Further development and refinement of risk management practices is expected to continue well into the future.

S&P – In October 2005, Standard & Poor’s (S&P) became the first rating agency to formally introduce ERM criteria into the insurance ratings process as a separate rating category. This rating agency focuses mainly on larger insurance companies. S&P evaluates a company’s ERM practice across five major categories: risk management culture; risk controls; emerging risk management; risk and economic capital models; and strategic risk management.

A.M. Best – A.M. Best believes that ERM results in “greater sophistication in the modeling of the organization’s risks.” (February 2006 special report) This rating agency focuses on small- to medium-sized insurers. A.M. Best expects ERM to continue to evolve as more data is collected and additional information is obtained through the analysis of such data. It believes that strong catastrophe risk management is an integral part of ERM.

Moody’s – Moody’s evaluates the strength of the risk management process, management support, the appropriateness of measures (given the business mix) and issues of technical competence around four key pillars: risk governance; risk management; risk analysis and quantification; and risk infrastructure and intelligence.

Fitch – In June 2006, Fitch introduced its own capital model called “Prism.” This stochastic economic capital model is used to evaluate capital adequacy for the insurance industry. Fitch will also consider a company’s in-house model as well as regulatory capital requirements.

ERM and the regulatory community

Since risk-taking is the fundamental element of an insurer’s business, the supervisor should encourage an insurer to establish an adequate ERM framework, appropriate to the nature, scale and complexity of its business, for evaluating and managing the risks for its businesses as a whole.

– IAIS (*Guidance Paper on Enterprise Risk Management for Capital Adequacy and Solvency Purposes*)

ERM plays an important role in regulatory circles. In October of 2007, the IAIS published a 17-page Guidance Paper on ERM, focusing on capital adequacy and solvency. The paper confirms that ERM is quickly becoming an established discipline and separately identified function, and is assuming a much greater role in many insurers’ everyday business practices. The IAIS believes that policies and processes for the management of risk are an integral part of the insurer’s ERM framework and should be established and approved, regularly monitored and reviewed by the board and senior management.

The Guidance Paper notes that the ERM framework should identify and address all reasonably foreseeable and relevant material risks to which an insurer is (or is likely to become) exposed. At a minimum, these risks include: underwriting risk, market risk, credit risk, operational risk and liquidity risk. Other risks that should be considered include: reputational risk, legal risk and the contagion risks from being a member of a group. Key features in the Guidance Paper are expected to form the basis of proposed standards. The IAIS recognizes that different levels of sophistication of supervisors and insurance markets around the world may hamper the uniform application of guiding principles in this paper..

In Canada, risk identification/assessment is a key component of OSFI’s Supervisory Framework, used to examine the safety and soundness of regulated financial institutions. The Supervisory Framework evaluates an institution’s risk profile, financial condition, risk management processes and compliance with applicable laws and regulations. It accommodates special requirements of the deposit-taking, life insurance and P&C insurance sectors.

OSFI prepares a Risk Matrix for each regulated financial institution, assessing the institution's inherent risks and the quality of its risk management. This Risk Matrix is factored into a Risk Assessment Summary which highlights an institution's present financial condition, prospective risk profile, key issues and past supervisory findings.

OSFI employs ERM in its own strategic planning process. For planning purposes, OSFI conducts an annual assessment of the overall economic and financial conditions (in Canada and abroad) that are key to the health of Canadian financial institutions. OSFI consults with the Bank of Canada and the Department of Finance on their macroeconomic forecasts. In addition, OSFI's assessment reflects input from international sources such as the Financial Stability Forum and other regulators. These sources supplement information derived from OSFI's own experiences with its regulatory and supervisory programs and from assessments made from its internal ERM activities.

OSFI's ERM program has identified several key risks to the achievement of its mandate and objectives. As part of the ERM process, the effectiveness of existing risk mitigation strategies has been assessed, taking into account both the current and expected environment. Where additional mitigation is required, and OSFI can have an impact, action is developed on a priority basis during the current planning period. Other key risks rated as cautionary are appropriately managed and monitored to ensure that risk mitigation remains on track.

The Society of Actuaries noted that the need for a true strategic approach to ERM is clear from recent events in this industry. *"A large multi-line carrier with both primary and reinsurance operations was unaware of its total exposure, through its various business units, to a single natural catastrophe – until the catastrophe occurred. The severe aggregation of losses and substantial loss of capital that resulted led to the carrier's hasty and premature exit from an entire business segment – one that has proven quite profitable for their competitors over the long run."*

In a June 2006 study (*The Role of the U.S. Corporate Board of Directors in Enterprise Risk Management*), The Conference Board noted that corporate directors may not be providing sufficiently robust enterprise risk oversight – and they could find themselves exposed to liability if they fail to keep pace with evolving best practices in ERM. The study cautioned that many corporate directors could be functioning with a false sense of security. New legal requirements are steadily suggesting that directors should ensure that their companies have a "robust" ERM program in place.

Standard ERM framework

Traditionally, risk managers have relied upon a five-step process in dealing with risks facing the organization – risk assessment, risk identification, risk scoring, critical risk analysis and action. Increasingly, however, risk managers are turning to ERM which calls for a much more comprehensive process. The standard approach – Australian/New Zealand Standard AS/NZ 4360:2005 – is a seven-step, structured process to managing risk. The steps include:

1. ***Establishing the context*** – Protocols regarding the management of risk should be consistent with the strategic, organizational and risk management context of the individual organization. All relevant stakeholders and their interests must be identified.

2. **Identifying the risk** – Identification should include all risks (regardless of whether they are under the control of the organization). A risk that is not identified is excluded from further analysis. It is necessary to consider possible causes and scenarios.
3. **Analyzing the risks** – Risks that have been identified need to be systematically and accurately assessed. Minor acceptable risks must be separated from major risks. A Risk Register should be prepared to record identified risks. This will facilitate the preparation of action plans and liaison with stakeholders, as well as the development of treatment options.
4. **Evaluating the risks** – This involves comparing the level of risk found during the analysis with the risk criteria identified on the first stage. Levels of risk are linked to the costs to mitigate same to produce a prioritized list of risks for further action.
5. **Treating the risks** – Risk treatment options can be identified from the ranked Risk Register. Costs of implementing the most appropriate option(s) are balanced against the benefits of risk mitigation. Action plans are developed detailing options/activities required, necessary resources, key implementation staff and a timetable.
6. **Monitoring and reviewing** – This is necessary to ensure that the risk treatment plan is effective and is performing to the expectations of stakeholders. Circumstances affecting the risk or method of treatment chosen are constantly changing.
7. **Communicating and consulting** – Most organizations have multiple stakeholders that would benefit from being informed of major milestones and other factors affecting the program. The success of a good risk management process depends upon the acceptance of the program by stakeholders – good communication will keep their interest.

(Source: *Enterprise Risk Management: Managing Risk in 7 Small Steps*, Risk Tech (Volume 3, Issue 2), CGI).

PACICC's risk management approach

PACICC's challenge is to identify and weigh inherent and residual risk probabilities against their possible impacts on the organization. This will enable PACICC to develop appropriate responses for managing the broad spectrum of risk situations. Probability is an important and well-established element of traditional risk management programs. It has less value, however, for risks that occur outside of normal business fluctuations and processes – where an event is rare or unprecedented, where rules are unknown, uncertain or rapidly changing, or where causes stem from external factors outside of the organization's control. Thus, vulnerability must be factored into overall risk assessments.

Vulnerability must be weighed against probability, depending upon the circumstances. Risks that are relevant and could greatly impact an organization must be addressed first (even when the likelihood may be low). At the other end of the risk spectrum, situations that have a lower likelihood of occurrence and weak/minimal impact on an organization will be assigned a lower priority. Some risk is inherent (that which exists in the absence of any action to alter its likelihood and potential impact), while some is residual (that which remains after attempts to mitigate the inherent risk).

In examining various scenarios and their related risks, PACICC will consider:

- The likelihood of a risk occurring and possible or probable links to other exposures
- Organizational vulnerability to various risks
- Possible gains or losses from risk-taking behaviour
- Costs to the organization to manage the various risks
- Changes to the likelihood or impact of a risk if it is managed or mitigated
- Other risks related to management or mitigation strategies.

Risks can be desirable or undesirable. Desirable risks are inherent in the organization's business model or normal future operations. Such risks can be effectively measured and managed. If the risk is undesirable, it is inconsistent with business objectives, offers unattractive rewards or cannot be effectively measured and/or managed.

Possible risk responses include:

- *Avoidance* – preventing exposure to future possible events from occurring
- *Acceptance* – maintaining the risk at its current level
- *Reduction* – implementing policies and procedures to lower risks to an acceptable level
- *Sharing* – shifting the risk (wholly or in part) to a capable, independent third party.

For every risk situation, PACICC stakeholders can reasonably expect that the organization will first consider all relevant business information and available options before deciding upon a prudent course of action. PACICC seeks to employ a consistent approach for mitigating and managing risks. PACICC's Board and Audit Committee receive semi-annual reports (spring and fall Board meetings) on possible risk exposures and corresponding risk management activities and initiatives. Risk considerations are factored into the corporate strategy and decision-making process.

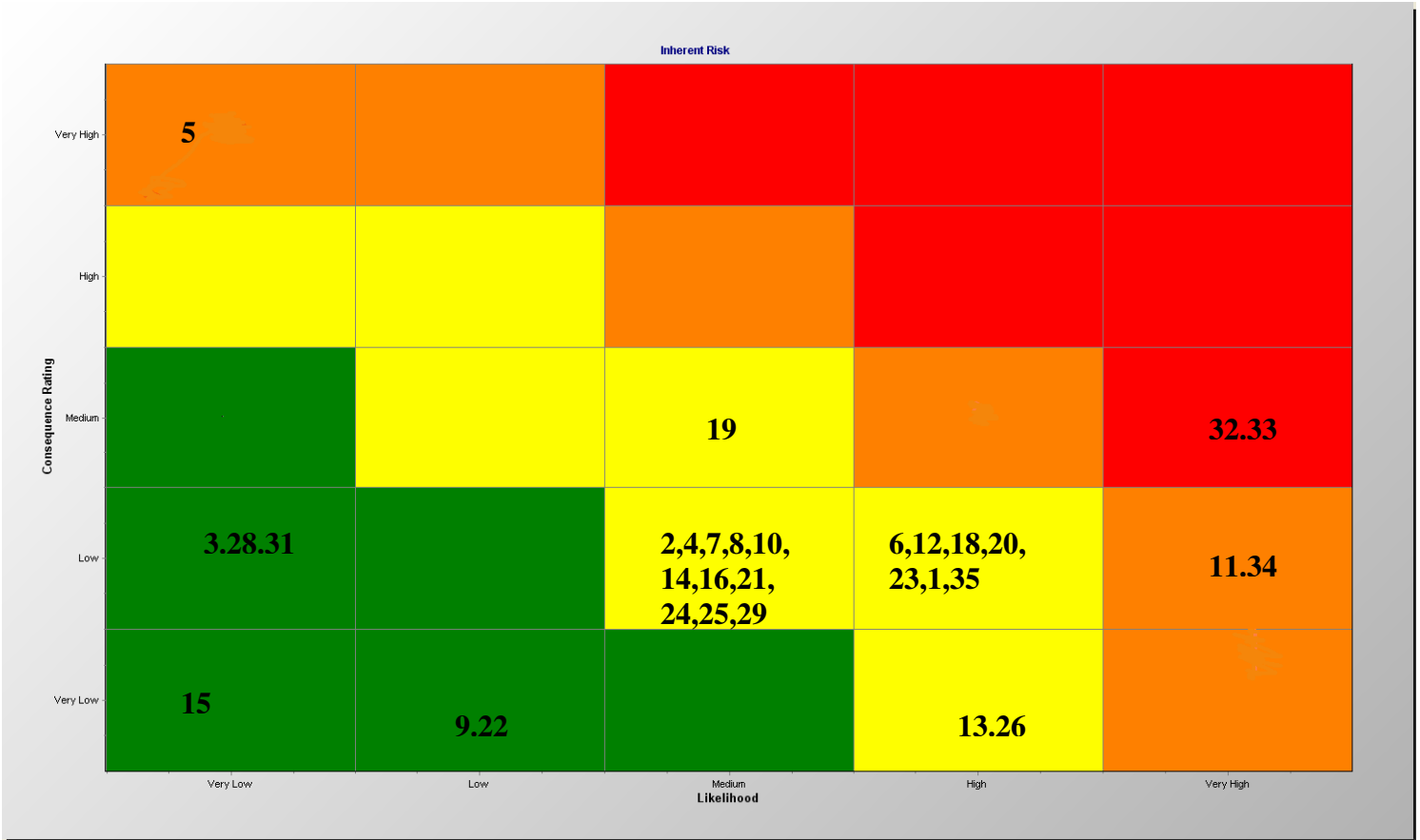
Information on the various risks (risk title; description; causes; current mitigation activity; and inherent impact/likelihood/risk) is summarized in PACICC's comprehensive Risk Register. This document is reviewed regularly and updated annually as part of the Corporation's strategic planning cycle.

PACICC's risk register

A proposed ERM framework (to identify and prioritize key risks faced by PACICC) was outlined in an information submission to PACICC's Audit Committee in February 2007. It was then presented to PACICC's full Board in April 2007. A peer review group was later assembled (June 2007) to provide expert advice and validation for PACICC's starting risk register and proposed ERM strategy. At its November 2007 meeting, PACICC's Board of Directors approved specific action plans to manage six higher-priority residual risks not being addressed by current mitigation activities.

The Board also approved an ERM reporting format wherein both the Audit Committee and the full Board will (at least annually) review progress in implementing action plans and suggest and approve the addition of risks to the Corporation's risk register.

Key to Risk Spread Chart



Risk levels

Proposed levels of urgency and action

	VERY HIGH	Requires detailed research, planning and decision making at the Board level and senior levels of management
	HIGH	Board and senior management attention and action needed
	MEDIUM	Management control responsibility must be specified
	LOW	No major concern and can be managed by routine controls and procedures

PACICC's risk register identifies 35 different risks to the Corporation. The risks are ranked in urgency, depending upon the likelihood of the threat materializing and the impact it could have upon the organization.

PACICC staff worked closely with BishopPhillips Consulting to (BPC Canada) to develop a risk register and risk management protocol appropriate for the Corporation. BPC Canada has a strong international history of providing Governance related consultancy and software to major corporations, government bodies, the higher education sector and small business operations. In assessing combined risks to the Corporation, the likelihood and impact of 35 different risks were separately evaluated in detail.

The **Likelihood** of each risk was assigned a numeric value as follows:

5 Very High

- *Ongoing risk* – Expected to occur many times per month
- *One-off risk* – Fully expected to occur or is occurring

4 High

- *Ongoing risk* – Expected to occur once every year
- *One-off risk* – Expected to most probably occur

3 Medium

- *Ongoing risk* – Expected to occur once every three years
- *One-off risk* – Expected to occur at some time (more likely than)

2 Low

- *Ongoing risk* – Expected to occur once every 10 years
- *One-off risk* – Expected to occur at some time (less likely than not)

1 Very Low

- *Ongoing risk* – Expected to occur once every 50 years
- *One-off risk* – Expected to occur only in exceptional circumstances (highly doubtful)

The **Impact** of each risk was assigned a numeric value as follows:

5 Very High

- *Financial* – Threatens PACICC's viability (above \$500 million in a single year)
- *Reputational* – Sustained negative international/national/sector coverage

4 High

- *Financial* – Between \$10 million and \$499 million in a single year
- *Reputational* – Intermittent negative national/sector coverage

3 Medium

- *Financial* – Between \$500,000 and \$10 million in a single year
- *Reputational* – Community concern expressed about PACICC's role

2 Low

- *Financial* – Between \$100,000 and \$500,000 in a single year
- *Reputational* – Mention of PACICC in intermittent negative local/sector coverage

1 Very Low

- *Financial* – Up to \$100,000 in a single year
- *Reputational* – Intermittent negative local coverage

In order to assign Board priority to the various risks, the combined likelihood and impact of each risk was factored into four general risk levels:

- **Very high** – This requires detailed research, planning and decision making at the Board level and senior levels of management.
- **High** – Board and senior management attention and action is needed.
- **Medium** – Management control responsibility must be specified.
- **Low** – No major concern. The risk can be managed by routine controls and procedures.

Following is a summary of the highest-priority risks (six of a total of 35) identified through PACICC's ERM framework – including causes, current mitigation strategies and recommended actions. These risks have a high likelihood of occurrence and could have a significant impact on the organization. Specific action plans are being developed to manage these risks, which are not being fully addressed by current mitigation activities. Addressing these issues will form the bulk of PACICC's ERM work in the near term. PACICC will review its progress in implementing action plans at least annually.

Six priority risks of PACICC

1. The insurance supervisory frameworks of certain provinces in Canada do not meet the standards recommended by the International Association of Insurance Supervisors (IAIS)

Inherent risk rating – High likelihood; High impact
(#33 in PACICC's risk register and red zone in the chart)

Causes

Some provincial insurance legislation and/or regulations in Canada do not contain strong or adequate minimum standards (for example, with respect to capital adequacy and corporate governance). Governance standards are sometimes recommended but often not required.

Current mitigation strategies and initiatives

PACICC has written to the provincial ministers responsible for insurance regulation to advocate that insurance solvency supervision be done by OSFI or by provinces that meet the standards of the International Association of Insurance Supervisors (IAIS). Implementing such improvements would help mitigate the impact of supervisory deficiencies – the OSFI standard meets IAIS requirements. The findings of PACICC-commissioned research (at the University of Calgary) to document gaps in provincial insurance legislative standards (compared to those recommended by the IAIS) will be made public in 2008. PACICC has presented its position on this issue to the Senate Committee on Banking, Trade and Commerce; to the Public Utilities Board of Newfoundland and Labrador as part of hearings on that province's insurance system; and in dialogue with members of CCIR.

Recommended actions

PACICC is researching supervisory frameworks within Canada to identify divergence from the IAIS standards. PACICC will develop a plan for awareness and education utilizing the research.

Options include meeting with appropriate government officials to advocate change – provincial regulators and ministers in charge of insurance for each jurisdiction. PACICC is also considering the inclusion of a risk factor for the quality of the insurance supervisory framework in any future risk-based assessments levied by the Corporation. PACICC will seek Board guidance in developing and prioritizing the options.

2. Federal and provincial insurance regulatory objectives may conflict

Inherent risk rating – High likelihood; High impact
(#32 in PACICC’s risk register and red zone in the chart)

Causes

Provincial regulation of insurance rates may contribute to solvency problems for certain insurance companies due to the potential conflict between market conduct and solvency supervisory objectives. Political pressure could be exerted on the rate filing/approval process. Also, incorrect assumptions regarding what constitutes an adequate rate of return for an insurance company could be a factor.

Current mitigation strategies and initiatives

PACICC is relying upon the scrutiny of insurance companies’ financial health by rating agencies, coupled with PACICC’s own financial analysis. Regulators are making greater use of risk-based supervision. PACICC research on the relationship between solvency and rate regulation has been initiated in order to engage in more informed dialogue on this issue and to enhance PACICC's credibility.

Recommended actions

PACICC is conducting research on the relationship between solvency and rate regulation. A review is under way of the feasibility of imposing an additional levy on members who are not forthcoming with appropriate data, to allow PACICC to assess their risks. PACICC is also considering adding a risk factor for rate regulation in any future risk-based assessments. PACICC will explore more proactive support of IBC’s advocacy for risk-based supervision by provincial insurance regulators. This could include a presentation of PACICC’s position to CCIR. A plan to utilize rate-regulation research findings (to help educate stakeholders in rate-regulated jurisdictions about the implications) will be developed. Using its *Financial Impact and Risk Evaluation (FIRE)* model, PACICC will simulate the potential impacts of rate regulation on insurer solvency.

3. PACICC may not be fully prepared operationally to respond to failure. The Corporation needs to clarify its preparedness, operationally, to respond to the failure of a larger member company, or to multiple, smaller-company failures. Part-time resources currently allocated to PACICC’s claims management function would likely be insufficient to handle a large volume of claims settlement requests.

Inherent risk rating – High likelihood; Medium impact
(#11 in PACICC’s risk register and red zone in the chart)

Causes

PACICC could face extraordinary demands on its human resources due to the failure of a larger member company, or to multiple company failures (e.g. resulting in a high volume of requests from liquidators for claims settlement authority). PACICC may also be unaware of the magnitude of risks presented by some provincially-supervised member institutions, due to inadequate financial disclosure.

Current mitigation strategies and initiatives

PACICC has an established arrangement with Crawford Adjusters Canada to provide call-centre capability and capacity. PACICC conducts simulations of insurer failure with input and advice from other parties. PACICC has adopted a Board-approved position on data availability. A relationship has been established with IBC to ensure the availability of regional industry spokespersons and additional consumer response capacity. PACICC maintains a proactive and healthy relationship with insurance regulators and is regularly monitoring activity. PACICC has developed its own modelling capacity (*Financial Capacity Assessment Model, FINCAM*) to support timely access to financial resources when required.

Recommended actions

PACICC will seek to develop a specific contingency plan to enhance its operational response to a large-scale member company failure, or to multiple small-company failures. This plan will address at minimum: 1) staffing with respect to claims-management resources, 2) communications, 3) availability of suitable work space, 4) media response, and 5) ability (and method) to pay for additional resources. PACICC has initiated a discussion with the Insurance Brokers Association of Canada to establish protocols for consumer information in future insurer insolvencies.

4. Insolvency costs could be greater than PACICC's resources.

Inherent risk rating – Very low likelihood; Very high impact
(#5 in PACICC's risk register and red zone in the chart)

Causes

Below are a number of situations that could conceivably cause PACICC to face insolvency-related costs that would exceed, or severely stretch, its available financial resources:

- The failure of a larger member company could result in claims liabilities exceeding \$500 million in the first year of the insolvency. Subsequent failures, occurring soon after the above scenario, would further strain financial resources
- Possible failure of a provincial insurer – where concentration in a small market limits the assessment base
- A relatively large number of member insurers could fail within a short period of time.
- PACICC could fail to observe signs of weakness in the financial position of member insurers
- A significant unexpected event could adversely affect the profitability of a number of member companies (for example, a natural catastrophe)
- Failure of an international conglomerate

- PACICC could fail to identify in a timely fashion industry trends or developments that might adversely affect the financial position of one or more member companies.

Current mitigation strategies and initiatives

PACICC's *FIRE* model helps to analyze risk concentration and to inform the Board of Directors and insurance supervisors of potential problems and issues. PACICC conducts an annual stress test of its member insurers where sufficient data are available. Insurance superintendents are encouraged to maintain strong (best practice) standards of capital adequacy and solvency supervision. Great emphasis is placed on adequate financial capacity and prudently managed compensation funds. PACICC actively monitors the business environment and insurance company financial performance, maintaining regular dialogue with members, regulators, liquidators and other stakeholders. PACICC investments are restricted to highly-rated, liquid financial instruments (mainly bonds). Steps have recently been taken to enhance PACICC's financial preparedness (for example, annual financial capacity was doubled in 2005).

Recommended actions

Current mitigation activity is focused on preventing this risk, and much has been done to that effect. Consequently the likelihood of the risk occurring is rated as very low. However, because the impact would be very high if the risk materialized, it is prudent to add some reactive mitigation actions. PACICC should:

- Develop a list of possible responses to the occurrence of this risk. Options include:
 - Exploring the possibility of an emergency lending arrangement with government should a catastrophic event confront Canada's P&C insurance industry
 - On a voluntary basis, bringing forward next year's contributions from larger, financially-strong members
 - Deferring payments to claimants.
- Decide what can be done now to make the options more effective.
- Develop a communications plan for policyholders and other stakeholders (regulators, brokers, media) making it clear that PACICC will pay all eligible claims in as timely a manner as possible. The plan could also clarify that PACICC's payment commitment is a voluntary one.

5. Insurance company winding-up and restructuring practices are outdated in Canada. Outdated legislation may be precluding the use of more efficient, lower-cost best practices in the winding-up of insolvent insurers in Canada

Inherent risk rating – High likelihood; Medium impact
(#34 in PACICC's risk register and red zone in the chart)

Causes

Canada's *Winding-up and Restructuring Act (WURA)* has not undergone a comprehensive review in nearly 100 years. Only occasional updates and changes have been made to the *Act*. Insolvency management and corporate restructuring practices have evolved internationally at a much faster pace than Canada's legislative framework has.

Current mitigation strategies and initiatives

PACICC has identified *WURA* reform as its top priority for 2008. Research commissioned by PACICC on possible reforms and improvements to the *Act* is largely complete.

Recommended actions

A strategy and work plan to address this risk is under development. The work plan focuses on consensus building, government relations implementation. Work plan details are part of the ERM action plan.

6. Current processes to ensure that confidential information held by PACICC is appropriately protected may require strengthening.

Inherent risk rating – Low likelihood; High impact
(#19 in PACICC’s risk register and red zone in the chart)

Causes

It is possible that confidential information could be leaked purposely, obtained illegally from PACICC’s offices, or perhaps lost in transit.

Current mitigation strategies and initiatives

PACICC is reliant upon the building management for security measures pertaining to its offices. PACICC’s confidentiality and privacy policy requires signature commitment when new employees are hired. Controls are in place governing the storage and use of confidential information – for example, PACICC’s computer services are outsourced and the contract provides appropriate security measures for electronic data retention.

Recommended actions

PACICC will document and implement a data/document classification and retention policy. This will involve:

- Defining data that is confidential in nature and setting standards for the storage of same
- Defining retention periods for documents (both paper and electronic) as well as applicable destruction methods.

PACICC will include “disclosure of confidential information” in a media response plan to be prepared for Board members and staff. PACICC will conduct a regular review of building security effectiveness – for example, an annual meeting with the building management and/or setting up a regular reporting by building management of incidents that could be of interest to PACICC (alarms, break-in attempts, disturbances, etc.). This review would better inform PACICC of the strength of current security measures and help to identify appropriate additional actions, if any.

Following is a summary of the other 29 business risks comprising PACICC's Detailed Risk Register.

Risk No	Risk Title	Description	Causes	Inherent Impact	Inherent Likelihood
32	Federal and provincial insurance regulatory objectives may conflict	Provincial regulation of insurance rates may contribute to solvency problems for certain insurance companies due to the potential conflict between market conduct and solvency supervisory objectives.	Political pressure exerted on the rate filing/approval process. Incorrect assumptions regarding what constitutes an adequate rate of return for an insurance company.	High	High
33	The insurance supervisory frameworks of certain provinces in Canada do not meet the standards recommended by the IAIS	Supervisory practices are deficient in parts of Canada's P&C insurance industry. This increases the potential for failure of a member insurer.	Some provincial insurance legislation and/or regulations in Canada do not contain strong or adequate minimum standards (for example, with respect to capital adequacy and corporate governance). Governance standards are sometimes recommended but often not required.	High	High
11	PACICC may not be fully prepared operationally to respond to failure	PACICC needs to clarify its operational preparedness to respond to the failure of a larger member company, or to multiple, smaller-company failures. Part-time resources currently allocated to PACICC's claims management function would likely be insufficient to handle a large volume of claims settlement requests.	PACICC could face extraordinary demands on its human resources due to the failure of a larger member company, or to multiple company failures (for example, resulting in a high volume of requests from Liquidators for claims settlement authority). PACICC may be unaware of the size of risk presented by some provincially-supervised member institutions - due to a lack of financial disclosure.	Medium	High
5	Insolvency costs greater than resources	PACICC could face insolvency-related costs that exceed, or severely stretch, its available financial resources	Failure of a larger member company could result in claims liabilities > \$500 million in the first year of the insolvency. Subsequent failures, occurring soon after the above scenario, would further strain financial resources. Failure of provincial insurer (concentration in a small market which limits assessment base). A relatively large number of member insurers could fail within a short period of time. PACICC fails to observe signs of weakness in the financial position of member insurers. Significant unexpected event affects the profitability of a number of member companies (for example, a natural catastrophe). Failure of an international conglomerate. Failure to identify problems in a timely fashion.	Very High	Very Low

Risk No	Risk Title	Description	Causes	Inherent Impact	Inherent Likelihood
19	Disclosure of confidential information	Current process to ensure that confidential information held by PACICC is appropriately protected may require strengthening.	Information could be leaked purposely. Information could be obtained illegally from PACICC offices. Information could be lost in transit.	High	Low
34	Insurance company winding-up and restructuring practices are outdated in Canada	Outdated legislation may be precluding the use of more efficient, lower-cost best practices in the winding-up of insolvent insurers in Canada	Canada's <i>Winding-up and Restructuring Act (WURA)</i> has not undergone a comprehensive review in nearly 100 years. Only occasional updates and changes have been made to the Act. Insolvency management and corporate restructuring practices have evolved internationally at a much faster pace than Canada's legislative framework has.	Medium	High
1	Failure to pay assessment obligations	Member companies could fail to pay their administrative or general assessment obligations to PACICC. Member assessments must be paid within 30 days of receipt.	Poor process by members leads to accidental late or non-payment Members having cash flow problems. Deliberate non-payment due to dissatisfaction. Data availability.	Medium	Medium
6	Insolvency costs greater than anticipated or necessary.	PACICC may fail to anticipate problems at specific member institutions, resulting in insolvency costs that are higher than necessary due to an absence of mitigation.	Failure of a member company for which PACICC has limited or no financial data and is ill-equipped to assess risk in advance. Our research shows that deficient loss reserves and/or inadequate pricing are key causes of insurer failure (and deficient reserves are hard to detect in advance).	Medium	Medium
12	Loss of key personnel	PACICC could lose key personnel and be without adequate staff for a period of time. The adverse impact on PACICC would be greatest for three positions – President & CEO; VP, Operations; and Manager, Research.	Senior staff could leave PACICC to accept other employment, for health reasons, etc. Lack of adequate succession planning by PACICC. Losing depth may potentially be a bigger exposure than losing a CEO.	Medium	Medium
18	Deficient governance practice within PACICC	Governance practices become deficient.	Lack of time and will for Board to focus on governance. Lack of expertise in implementing best practice governance. Lack of ERM process.	Medium	Low
20	Legal action	Legal action could be launched against PACICC (PACICC could be sued).	Legal action against PACICC could be launched by: dissatisfied policyholders, disgruntled current/former staff or contracted service providers.	Medium	Medium

Risk No	Risk Title	Description	Causes	Inherent Impact	Inherent Likelihood
23	Adverse change in insurance legislation	Insurance legislation in Canada could be changed, or interpretation could change, in a way that adversely affects PACICC.	Government could enact legislation affecting aspects of PACICC's operations (membership eligibility, industry funding, reporting procedures, Board composition, regulatory oversight, etc.) PACICC could be compelled to add members in a line or lines of business inconsistent with its mandate. PACICC may lack adequate legal counsel to properly advise the Corporation about an adverse legislative development. The risk is higher for legislation proposed or enacted by provincial governments. Potential for frustration if insurance regulators believe they need to exert greater control / influence over PACICC So-called independent Boards at other financial guarantee funds (for example, Assuris) could encourage regulators to expand that particular model of governance.	Medium	Medium
35	Requirement for all Board members to be public directors	Government may pressure PACICC to structure its Board to be composed entirely of public directors	Perceived deficiencies in how PACICC is meeting the needs of insurance consumers. PACICC's own research shows that most P&C insurance guarantee funds in other countries are governed by a majority of industry directors. It is important to note that regulators cannot compel PACICC to be governed entirely by public directors. Regulators also appear to be satisfied at this time with PACICC's Board structure.	Medium	Medium
26	Failure of key supplier	The financial failure (or significant equipment/process failure) of an important supplier could result in disruption or non-delivery of key services to PACICC.	Unanticipated failure could impair PACICC operations in the short-term while alternate arrangements are made (new supplier contracted or new equipment sourced). Key service areas include: IT services supplier, Financial accounting, Corporate secretary, Investment management, Banking and Legal.	Low	Low
2	Volatility in value of invested assets	The value of PACICC's invested assets could be adversely affected. Main concern applies to the Compensation Fund, which is PACICC's chief source of insolvency-related liquidity.	Downturn in financial markets. Poor investment choices.	Medium	Low
4	Rising interest rates	Rising interest rates could increase the cost of PACICC debt obligations.	Canada is faced with difficult financial conditions, causing the Bank of Canada to raise interest rates.	Medium	Low

Risk No	Risk Title	Description	Causes	Inherent Impact	Inherent Likelihood
7	Insolvency costs are unrecoverable	PACICC could be asked by authorities to cover insolvency-related costs that it cannot recover, either in whole or in part.	Broader interpretation of policy wording. Insurance supervisors could, for example, coerce the industry into funding higher levels of premium refunds than PACICC currently provides. If PACICC was forced to cover certain specialty lines, the assessment base could be insufficient to fund the costs of failure (for example, this could be triggered by a change in a provincial statute).	Medium	Low
8	Excessive property or liability loss	PACICC could incur a property or liability-related financial loss that exceeds its insurance policy coverage limits.	Actions brought against PACICC's Directors & Officers for breach of duty. Property-related loss.	Medium	Low
10	Government decision to tax the Corporation's investment income	PACICC could be adversely affected by a government decision to attempt to tax the Corporation's investment income, which currently accumulates tax-free.	Change in tax policy could be announced by the federal government without consultation. Existing policy could be "reinterpreted" by the Canada Revenue Agency to question the tax-free status of PACICC's Compensation Fund.	Medium	Low
14	Significant IT failure	PACICC could experience a significant IT failure that could impose significant costs on the Corporation.	Equipment failure. Computer viruses. Attack by computer hacker.	Medium	Low
16	Inappropriate staff conduct	PACICC could be adversely affected by inappropriate conduct of a staff member (such as unethical or unprofessional behavior, an illegal act, unauthorized use or disclosure of information, sexual harassment, and so forth).	Inappropriate conduct could be willful (for example, fraud, theft, use of confidential information). Inappropriate conduct could be accidental (for example, disclosure of information, perceived professionalism, etc.).	Medium	Low
21	Conflict of interest	A conflict of interest could arise at the Board level that proves difficult to resolve.	Disagreement between Board members could disrupt Board unity. Board member(s) in conflict may not feel obligated to resolve the problem.	Medium	Low
24	Jurisdiction withdraws from PACICC	A participating jurisdiction or jurisdictions could decide to end their agreement with PACICC and establish their own guarantee fund.	Participating jurisdiction may seek greater profile and more direct involvement in local consumer issues. Participating jurisdiction may have issues with PACICC treatment of local consumers. A participating jurisdiction or jurisdictions could express non-confidence in PACICC as the designated guarantee fund. Participating jurisdiction may object to elements of PACICC's operations (for example, decision-making process, costs, customer service, financial preparedness).	Medium	Low

Risk No	Risk Title	Description	Causes	Inherent Impact	Inherent Likelihood
25	Errors or omissions affecting its internal accounting	PACICC could encounter problems if there are errors or omissions affecting its internal accounting.	<p>PACICC's annual audit is qualified - there is some inherent risk that assumptions employed or information used by auditors may not be correct or complete.</p> <p>The broad-ranging disclaimer accompanying PACICC's annual audit reports could expose the Corporation financially if the information supplied by internal accounting was incorrect or incomplete.</p> <p>Failure to appropriately record or account for sizeable payments could result in revisions to financial statements.</p>	Low	Low
29	Negative media attention	PACICC could be the subject of negative media attention, whether founded or unfounded, that could damage the Company's reputation.	<p>PACICC may be surprised by an event and react in a way that causes negative media attention.</p> <p>PACICC may generate negative attention by its own actions. Public statements could be made by a member of PACICC's Board or management that could reflect poorly on the organization/industry.</p> <p>Focus is on the conduct of staff, Board members, auditors, service providers, etc. Focus is on the role/merits/service of the organization.</p>	Medium	Low
13	Loss of accumulated liquidation expertise	PACICC could be adversely affected by the loss of key personnel and accumulated expertise in the community of insurance company liquidation professionals, due most likely to retirements.	<p>Ageing and pending retirement of the most experienced licensed trustees in bankruptcy who have served as liquidators of insolvent insurance companies.</p> <p>A sustained period of good financial health in the P&C insurance industry, diminishing opportunities to train successors.</p>	Low	Medium
9	Financial requirements exceed budget	PACICC could face operating financial requirements in excess of its approved budget.	An unanticipated large capital or operating expenditure, such as IT or premises costs.	Very Low	Low
22	Board contains CEO of insolvent member	The CEO of a member company that is ordered to be wound-up could also be a member of PACICC's Board of Directors.	<p>Company's poor financial health threatens its future and consequently the PACICC Board tenure of that company's CEO.</p> <p>Requirement for regional representation may result in candidates from financially-weaker member companies.</p>	Low	Low
3	Fraud or misappropriation	Fraud or misappropriation of PACICC funds.	<p>Theft or misuse of funds by an employee or manager/trustee of PACICC funds.</p> <p>External fraud.</p>	Low	Very Low

Risk No	Risk Title	Description	Causes	Inherent Impact	Inherent Likelihood
28	Contested claim denial	PACICC could deny payment of a claim that is later contested in Court and reversed in favour of the policyholder. (This situation would be unlikely to arise without concurrence of the Court-appointed Liquidator).	While PACICC makes decisions based on the best available information, this could later be proved factually incorrect or faulty. A dispute could arise between PACICC and one or more insurance supervisory authorities that could reflect poorly on the Corporation.	Low	Very Low
31	Unfair or discriminatory practices	PACICC could be accused of engaging in unfair or discriminatory practices.	Member companies may argue that services are not delivered uniformly. Current/former staff could raise issues regarding management, remuneration, etc. Suppliers could claim unfair trade practices by PACICC.	Medium	Very Low
17	Major external event	PACICC's operations could be adversely affected by a major external event that could make it impossible, difficult or risky for employees to travel to work at the PACICC office in Toronto and/or to communicate effectively.	Issues affecting the availability of staff will have an immediate/direct impact on PACICC service delivery to stakeholders (policyholders, members, supervisory authorities, media, etc.). Events could include: flu pandemic, terrorist attack, large-scale natural disaster, power black-out, fire, or a severe-weather event .	Very Low	Medium
15	Property loss	PACICC could experience a property loss – such as a fire or theft – that could cause significant damage to its physical work location and corporate records.	Fire or explosion in our building/ work location. Break-in involving theft or vandalism on premises. Loss of laptops.	Low	Very Low
27	Problems with contract commitments	PACICC could encounter problems with contract commitments (for example, if employees who lack authority entered into binding agreements).	Lack of knowledge by people entering into contracts. Disgruntled staff member could exercise unauthorized power.	Very Low	Very Low

Sources

Aviva Canada Appoints a “Chief Pessimist”: P&C Company Embraces Enterprise Risk Management, Barbara Aarsteinsen, Canadian Insurance, July/August 2006

Canadian Property/Casualty – 2007 Review & Preview, A.M. Best Research, September 10, 2007

Enterprise Risk Management (PACICC Board Seminar), Susan Meltzer, Aviva Canada, February 2007

Enterprise Risk Management – Integrated Framework, Committee of Sponsoring Organizations of the Treadway Commission, September 2004

Enterprise Risk Management: Managing Risk in 7 Small Steps, Risk Tech (Volume 3, Issue 2), CGI

Enterprise Risk Management: Specialty Guide, Society of Actuaries, May 2006

Enterprise Risk Management: Theory and Practice, Brian Nocco and René Stulz, July 2006

Enterprise-Wide Risk Management Special Report, Risk magazine, Chris Mills, Arthur Andersen, November 1999

Implementing Enterprise Risk Management, William Shenkir and Paul Walker, University of Virginia, Institute of Management Accountants, 2006

International Association of Insurance Supervisors (IAIS) Guidance Paper on Enterprise Risk Management for capital Adequacy and Solvency Purposes, October 2007

Plan and Priorities 2006-2009, Office of the Superintendent of Financial Institutions (OSFI)

Raising the Bar – Rating Agencies: A Driving Force Behind Enterprise Risk Management, Benfield ReMetrics (Financial Consulting), October 2006

Supervisory Framework: 1999 and Beyond, Office of the Superintendent of Financial Institutions

The Principles of Enterprise Risk Management, Virchow, Krause & Company, October 2006

The Risk Intelligent Enterprise: ERM Done Right, Mark Layton and Rick Funston, Deloitte & Touche LLP, 2006

The Role of the U.S. Corporate Board of Directors in Enterprise Risk Management, Carolyn Kay Brancato, Matteo Tonello and Ellen Hexter, The Conference Board, June, 2006