



## **RISK-BASED REGULATION**

### **Framework Document**

**Financial Services Commission of Ontario  
September, 2011**

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## ***Executive Summary***

This document describes a broad-based framework by the Financial Services Commission of Ontario (FSCO) for the risk-based regulation of pension plans in Ontario. The purpose of introducing this framework is to improve FSCO's overall effectiveness in its monitoring of key pension risks, and to ensure appropriate regulatory response is taken by FSCO to address risk situations, thereby better protecting the interests of pension plan beneficiaries. It also serves in part to address the Ontario Expert Commission on Pensions' recommendations in regard to FSCO, which are contained in a report entitled *A Fine Balance – Safe Pensions, Affordable Plans, Fair Rules*.

Our proposed framework is grounded on the following five principles:

- **Proactive** – We will take proactive measures to promote compliance and to reduce risks to plan beneficiaries;
- **Focused** – We will focus our attention on those plans posing the most serious risks to the security of plan beneficiaries' benefits;
- **Proportionate** – Our regulatory response will be proportionate to the risks identified, with due regard to the probability and impact of risk, and we will intervene on a specific basis only when necessary;
- **Consistent** – We will apply our approach consistently and in a way that minimizes uncertainty about our likely response; and
- **Informed** – Our assessment of risk and regulatory response will be informed by the evidence gathered from appropriate sources.

In addition, our approach is building on existing risk-based processes that have proven to be effective. The risk-based approach as proposed in this document will apply to any Ontario registered pension plan that provides either defined benefit (DB) or defined contribution (DC) benefits, or both.

The core of the framework is a Regulatory Response Model, which includes a trigger mechanism based on readily available information and supported by a plan specific assessment process to identify plans posing the greatest risks. Both the likelihood and impact of risk are taken into account in the assessment process. As well, a certain degree of judgment will be required depending on the nature of the risks being assessed.

In designing the trigger mechanism and assessment process, we intend to focus initially on five risk areas, namely:

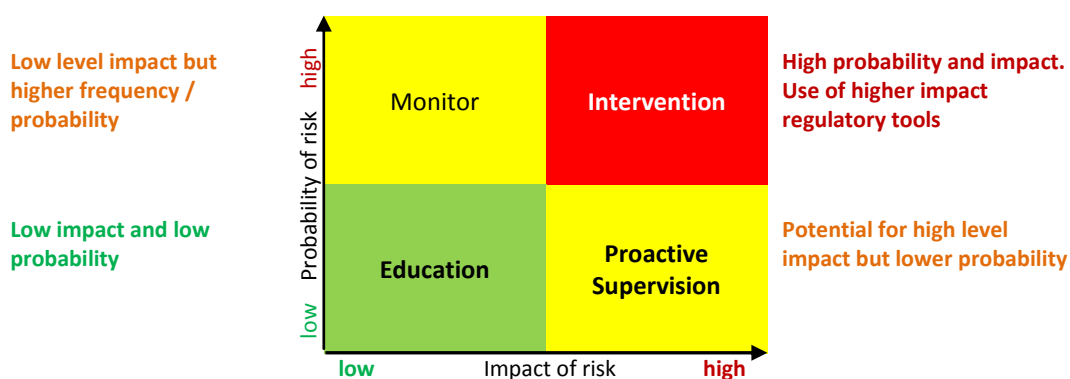
## Risk Based Regulation Framework

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- funding risk,
- investment risk,
- administration risk,
- governance risk, and
- sponsor/industry risk.

If a plan is selected for review by the trigger mechanism, a risk assessment on the plan will be performed to determine if there are any significant issues that require follow up. We would look carefully at the circumstances of the plan before deciding on the appropriate regulatory actions to take. In some cases, the regulatory actions may include prosecution under the Pension Benefits Act.

The following chart depicts the Regulatory Response Model that FSCO will use internally to guide the regulatory actions taken for different plan situations:



The proposed framework is a significant change to the way in which FSCO regulates. The full implementation of the framework will take time and flexibility will need to be built into transition plans as implementation is phased in. We plan to carry out over the next three years the following activities:

1. Enhance existing risk-based processes - integrating the monitoring and review of funding and investment risks; adding other risk factors (e.g., late filings, stakeholder complaints) to the trigger mechanism; strengthening site examinations.
2. Enhance stakeholders' understanding of FSCO's risk-based approach.
3. Establish a quality control and maintenance process.

## Introduction

### 1.1 Background

Over the past decade pension regulators around the world have been moving towards risk-based regulation. This trend has been sparked by a desire to address funding issues, as well as to promote good governance and risk management practices, in recognition that pure compliance approaches are limited. As an initial step, FSCO has instituted processes addressing funding and investment risk.

The Ontario Expert Commission on Pensions recommended in its report *A Fine Balance – Safe Pensions, Affordable Plans, Fair Rules* that FSCO should:

- Develop a program of proactive monitoring, auditing, inspections and investigations directed especially at plans whose profiles, sponsors' profiles or sectoral location suggest that they may be at risk of failure or of significant under-funding.
- Expand and update its existing systems for monitoring risks, ensure that these systems are designed and administered by expert staff, and supplement them with other strategies for detecting plans at risk.
- Be empowered to undertake remedial measures based on the results of its proactive monitoring.

Furthermore, FSCO's assessment is that:

- Current pension regulatory programs at FSCO may not identify all key risks inherent in pension plans and may not adequately protect the interests of pension plan beneficiaries. FSCO pension staff can be allocated more effectively to address pension plan risks.
- Through the expansion and enhancement of its existing risk-based monitoring programs, FSCO could better monitor primary pension risks, and ensure appropriate steps are taken to address non-compliance and risk taking without proper risk governance, thereby better protecting the interests of pension plan beneficiaries.
- With access to consolidated data and information collected from stakeholders and other available sources, and the provision of sufficient regulatory authority and resources, FSCO would be equipped to address non-compliance and to mitigate potential risk to pension plans and their beneficiaries in a more timely, effective and efficient manner.

## Risk Based Regulation Framework

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A project to enhance risk-based regulation was established by FSCO in 2009, in response to the Ontario Expert Commission on Pensions Report that recommended, inter alia, developing a program of proactive monitoring of pension plans and updating systems and processes to detect plans at risk.

The Framework as proposed in this document builds on the existing risk monitoring programs that have proven to be effective and considers a broader universe of pension plan risks including those related to administration, governance and sponsor related risks.

The Framework provides for a base level of regulation across all pension plans including monitoring of key risk indicators, improved dialogue with pension stakeholders, and promotion of best practices. Above this base level, the Framework directs staff to those plans that are exposed to or exhibit greatest risks. It is expected that this approach would help FSCO more effectively monitor and manage the risk of pension plan failure and optimizes its use of regulatory resources.

The Framework presented herein is based on consideration of the pension plan environment in Ontario, the current regulatory activities of FSCO's Pension Division, as well as leading practices in risk-based regulation that have been adopted by The Pensions Regulator in the United Kingdom, the Australian Prudential Regulation Authority, the De Nederlandsche Bank in the Netherlands, and the Office of the Superintendent of Financial Institutions of Canada.

### 1.2 Objectives

The objectives for FSCO's risk-based regulation of pensions are set out below:

- Regulation should enhance the security of plan beneficiaries' benefits.
- Regulation should reduce the risk of situations which may lead to calls on the Pension Benefits Guarantee Fund (PBGF).<sup>1</sup>
- Regulation should ensure compliance with the law, in particular ensuring FSCO discharges its responsibilities set out in the Pension Benefits Act.
- Regulation should encourage sponsors and plan administrators to adopt good governance, risk management and business practices.

These objectives are broadly consistent with those observed at peer regulators. The risks that are addressed on the basis of the above objectives are defined by the Risk Universe contained within the Framework.

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<sup>1</sup> It should be noted, however, that we do not regard our objective of reducing the risk of situations which may lead to calls on the PBGF as meaning that this risk should, or could, be reduced to zero. As the causes of calls on the PBGF are very diverse, particularly those related to employer insolvency, it is not possible for the regulator to achieve this outcome.

### 1.3 Design Principles

In designing the Framework, a number of key principles have been considered. These design principles assist in creating a framework that is consistent with the risk-based regulation objectives and recognize FSCO's current staff, activities and plans. The key principles are as follows:

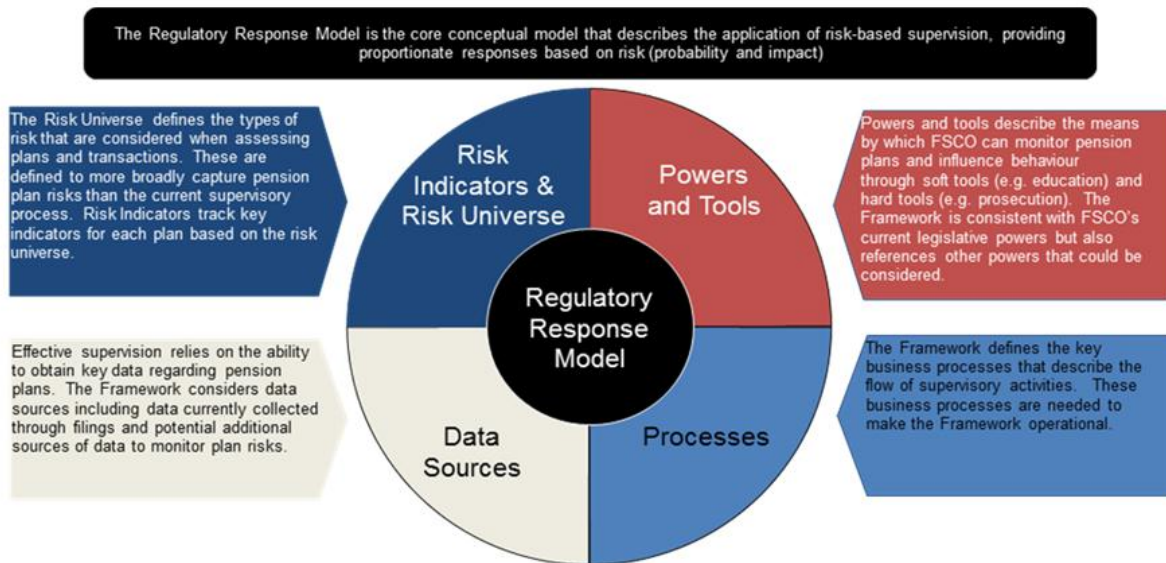
- **Proactive** – The Framework should entail proactive measures to promote compliance and to reduce risks to plan beneficiaries, recognizing that prevention is better than cure.
- **Focused** – The Framework should encourage a focus on the appropriate risk areas, minimize side effects, and ensure staff is targeted towards plans and areas of higher risk.
- **Proportionate** – The Framework should enable FSCO to plan its regulatory activities proportionate to the risk involved. This includes use of high impact regulatory tools towards areas of higher risk and intervention only when necessary.
- **Consistent** – The approach applied within the Framework should be consistent and in a way that minimizes uncertainty about our likely response.
- **Informed** – Risk assessment and our regulatory response should be informed by the evidence and due attention should be paid to the plan's existing governance/risk management practices as well as emerging risks.
- **Transparent** – In order to enhance stakeholders' understanding of FSCO's expectations, the regulatory processes established within the Framework should be clearly communicated to all internal and external bodies that are affected by the processes.

In addition, FSCO already has some risk-based monitoring processes that have proven to be effective and these would be built upon. Furthermore, in developing and implementing the framework, FSCO recognizes the need to balance the extent of its regulatory activities with the administrative burdens put on the plan sponsors.

## 2. The Proposed Framework

The following chart depicts the component parts of the Framework. The key elements of the Framework are described more fully in the balance of this document.

Figure 2.1



## 2.1 Regulatory Response Model

The Regulatory Response Model, illustrated by the diagrams in this section (Figures 2.2 – 2.4), lies at the core of the Framework. The diagrams summarize our approach to prioritizing regulatory work according to risk. Both the probability and the impact of risk are taken into account in determining FSCO's level of response in specific cases.

The Framework envisages that the model will be used to assess plan and transaction risks on an ongoing basis. Plans and transactions will be classified into one of four risk quadrants after a detailed review that involves a certain level of professional judgments. Consideration of the risk universe and related risk indicators, as well as any risk mitigation measures implemented by the plan, would be made in determining the quadrant into which a plan or transaction falls. Assignment of a plan or transaction to a quadrant is an internal means used to guide the effective allocation of staff resources and the regulatory actions taken by FSCO.

The model provides for a base level of regulation across all pension plans including a focus on industry education, promotion of best practices and monitoring of risk indicators. Above this base level, the model directs staff to those plans that are exposed to or exhibit greater risks. It is expected that this approach would help FSCO more effectively manage the risk of pension plan failure and optimize the use of regulatory resources.

Figure 2.2

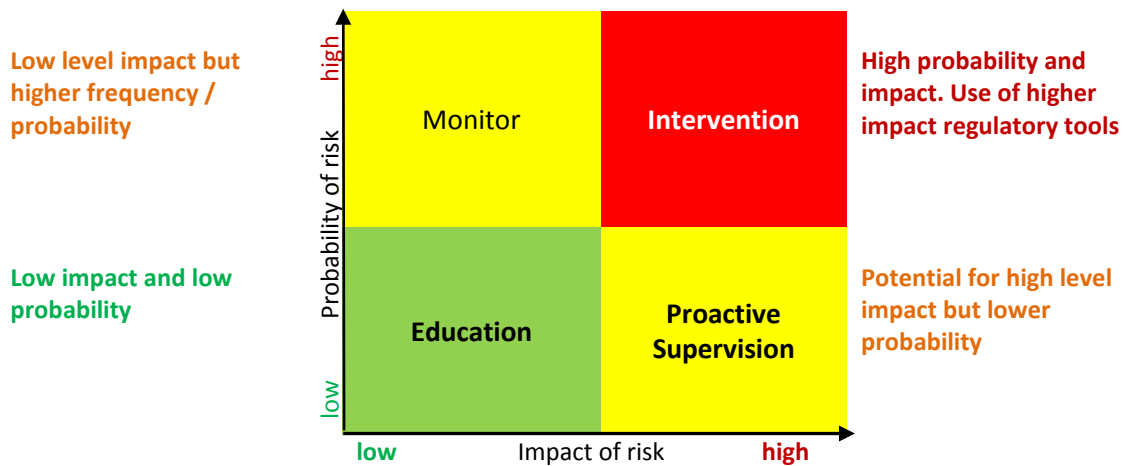
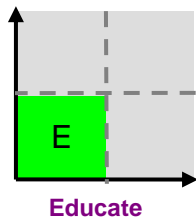
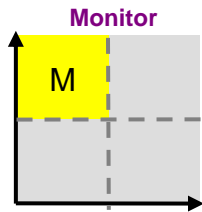


Figure 2.3

|                                     | Examples of Plans / Issues  | Potential Regulatory Responses  |
|-------------------------------------|---|---|
| <p><b>Intervention</b></p>          | <p><b><u>Intervention: High Impact, High Probability</u></b><br/>                     High risk events/transactions (e.g. failure to remit contributions over extended period of time, major corporate restructurings affecting large number of plan members)<br/>                     Chronic significant underfunding, especially in collective bargained plans with periodic benefit improvements<br/>                     Significant member complaints about plan administration or benefit entitlements<br/>                     Significantly underfunded plans carrying excessive investment risks<br/>                     Plans with significant sponsor risk (e.g. CCAA)</p> | <p><b><u>Intervention: High Impact, High Probability</u></b><br/>                     Regular interactions and/or meetings with plan administrator, sponsor, plan advisors, etc.)<br/>                     Take proactive measures to mitigate risks<br/>                     Keep FSCO Management abreast of the issues and corresponding regulatory actions taken<br/>                     Site examinations<br/>                     Action or legal proceedings pursuant to PBA</p> |
| <p><b>Proactive Supervision</b></p> | <p><b><u>Proactive Supervision: High Impact, Low Probability</u></b><br/>                     Very large plans may fall into this category due to the potential for adverse impact on a large number of members, or very high impact on the PBGF in the event of employer insolvency<br/>                     Plans where there are early signs of high impact events occurring</p>   | <p><b><u>Proactive Supervision: High Impact, Low Probability</u></b><br/>                     Ongoing monitoring<br/>                     Included in periodic management reporting, particularly if impact can be very large<br/>                     Ongoing media monitoring of plan and sponsor<br/>                     Possible interactions with plan<br/>                     Consider for site examinations</p>  |

Figure 2.4



| Examples of Plans / Issues   | Potential Regulatory Responses   |
|--|--|
| <p><b><u>Monitor: Low Impact, High Probability</u></b></p> <p>Smaller plans with clear risk indicators (e.g. small plan but significant solvency issue, contribution issues etc.). Issues can be either significant individually or in combination.</p> <p>Larger plan but issue itself is not a large impact, e.g. consistently late filings, although consideration should be given to whether issue relates to other larger risk, especially in combination with other indicators (e.g. late filings plus large number of member complaints).</p> | <p><b><u>Monitor: Low Impact, High Probability</u></b></p> <p>Continue to monitor and flag if identified risks persist or additional risk indicators present</p> <p>Enhanced review may be appropriate</p> <p>Communication with plan administrator may be warranted, e.g. to bring awareness of the issue, request explanation</p>  |
| <p><b><u>Educate: Low Impact, Low Probability</u></b></p> <p>Plans other than very large plans with little or no risk indicators present</p> <p>Many IPPs and DC plans will fall in this category (although IPPs and DC plans with significant risks or issues may fall into other categories)</p>   | <p><b><u>Educate: Low Impact, Low Probability</u></b></p> <p>No specific communications to individual plans required</p> <p>Provide general education/communications to plan administrators and advisors, with a view to enhancing understanding of pension administration, governance principles and PBA requirements, e.g.:</p> <p>FSCO reports and industry sessions</p> <p>Guidance notes / best practices</p> |

## 2.2 Risk Universe

The proposed risk universe is intended to capture broadly the risks inherent in pension plans. Risk indicators for key risks will be developed and tracked for all plans. They are used as guidance when applying the Regulatory Response Model and in performing more detailed risk assessments. While it describes the various risks that could potentially be considered, judgment will be applied to determine what risks to review in specific cases and to what extent.

It is recognized that some of the risks will be more challenging to assess than others. In some cases, the tools or information to make meaningful assessments of specific risks are not currently available. Therefore, more emphasis will be given to those risks in the universe for which meaningful and relevant assessments can be made.

The Framework envisages that detailed risk assessments will be performed primarily on plans identified as being exposed to or exhibiting potentially higher risks. However, detailed risk assessments will also be performed on other plans periodically as part of the quality control process to ensure that the Framework remains effective.

The risk universe focuses on risks within pension plans. The following risk universe categorization will be used:

- Funding Risk
- Investment Risk
- Administration Risk
- Governance Risk
- Sponsor/Industry Risk

Definitions and examples of risk considerations for each category are set out in Table 2.1 below, which are meant to be illustrative only. Modifications may be necessary in certain cases to reflect the particular circumstances of the plan and other risk considerations that may arise. In addition, the assessment of risks would take into account the risk management practices, if any, that have been implemented by the plan administrator.

Table 2.1

| Risk Area  | Example Inherent Risk Considerations  |
|--|---|
| <p><b>Funding Risk</b><br/> <i>The risk to member benefits posed by shortfalls in plan funding</i></p>   | <ul style="list-style-type: none"> <li>• Appropriateness of actuarial assumptions and methods used in valuations</li> <li>• Plan solvency per actuarial reports and internal (FSCO) estimates</li> <li>• Timeframe for plan recovery</li> <li>• Late or unremitted contributions</li> </ul>   |
| <p><b>Investment Risk</b><br/> <i>The risk of exposure to changes in the value of plan assets that support the plan liabilities</i></p>                                    | <p><u>Market Risk (exposure to changes in market prices)</u></p> <ul style="list-style-type: none"> <li>• Volatility of investment products</li> <li>• Complexity and liquidity of investments</li> </ul> <p><u>Matching Risk (risk of mismatch between assets and liabilities)</u></p> <ul style="list-style-type: none"> <li>• Difference in average duration between assets and liabilities</li> <li>• Classes of investments held vs. liabilities for active / retired members</li> </ul> <p><u>Credit Risk (risk of counterparty failing to meet obligations)</u></p> <ul style="list-style-type: none"> <li>• Credit quality of assets</li> </ul> |
| <p><b>Administration Risk</b><br/> <i>The risk associated with inefficient or insufficiently effective processes or organization in the administration of the plan</i></p> | <ul style="list-style-type: none"> <li>• Benefit processing (accuracy, timeliness and communication)</li> <li>• Complex plan arrangements</li> <li>• Recordkeeping procedures</li> <li>• Errors / complaints: Frequency and response effectiveness</li> <li>• Late filings / errors in filings</li> <li>• Multi-jurisdictional plans</li> <li>• Regulatory compliance</li> </ul> <p><b>Note: Some aspects can only be assessed through plan examination</b></p>   |

Table 2.1

| Risk Area  | Example Inherent Risk Considerations   |
|--|--|
| <p><b>Governance Risk</b><br/> <i>The risk associated with lack of or poor governance practices</i></p>  | <ul style="list-style-type: none"> <li>• Existence of code of conduct / policies and procedures</li> <li>• Use of qualified outsourced providers and oversight by the plan administrator</li> <li>• Existence of oversight / monitoring / supervision policies and evidence that policies are followed (i.e. internal controls)</li> <li>• Information, performance measures and risk management processes</li> </ul> <p><b>Note: Some aspects can only be assessed through plan examination</b></p> |
| <p><b>Sponsor/Industry Risk</b><br/> <i>The risk of sponsor insolvency or potential adverse financial impact due to industry-wide events</i></p> | <ul style="list-style-type: none"> <li>• Continuity / financial strength of pension plan sponsor</li> <li>• Business outlook of Industry sector; industry reports</li> <li>• Mergers / acquisitions /Downsizing</li> </ul>   |

## 2.3 Risk Indicators

The Framework recommends that risk indicators be developed consistent with the risk universe. When developing risk indicators, consideration should be given to the following:

- FSCO's ability to obtain, track and report on the risk indicator;
- The ability to leverage current processes and information tracked by FSCO;
- The relative importance of the risk indicator in identifying plans at risk;
- The total number of risk indicators – including consideration that too many indicators can reduce the usefulness of the indicator concept as it can be difficult to assess which indicators are relevant for which plan.

The Framework recommends that a tool be developed to present the risk indicators through taking quantifiable / measurable risk-based metrics and presenting these in an appropriate format. The appropriate format will be one that can be supported by FSCO's IT system and that presents the indicators clearly and concisely (e.g. on one page / screen, such as a dashboard format).

The primary purpose of the risk indicator tool is to provide an initial pre-screening to establish a preliminary assessment within our Regulatory Response Model. The tool will highlight potential key risk areas for further analysis and will be used to prioritize our regulatory activities. It will also support staff in the next level of review within the Framework.

The risk indicator tool will likely include indicators that can be automated and others where manual input is required. For example, funding risk and investment risk indicators can build on the data collected in the AIS and IIS filings and for which we have already established some risk-based monitoring processes. These existing processes can be used (perhaps with modifications) to provide the risk indicator ratings in an automated fashion. Other indicators, such as sponsor specific risks, may be identified through manual processes such as media searches or other sources.

The risk indicator tool can be implemented initially based on information currently available in our database. Over time, the risk indicators to include in the tool will be refined based on availability of information as well as our experience with each indicator's effectiveness in satisfying the main purpose of the tool. Prior to their application, we will perform tests on the risk indicators to determine if they provide the desired results within the Framework.

Indicators to consider for initial implementation are shown in Table 2.2 below.

Table 2.2

| Risk Category           | Risk Indicator                   | Potential Rating Method  |
|-------------------------|----------------------------------|--|
| <b>Funding</b>          | Flags based on AIS data          | System rule based on AIS process (e.g. plan solvency, actuarial assumptions, actuarial gains/losses, demographics, etc.) |
|                         | Late or unremitted Contributions | System rule based on frequency, tardiness and size of late contributions   |
| <b>Investment</b>       | Flags based on IIS data          | System rule based on IIS process (e.g. regulatory breach, investment performance, asset/liability mismatch, etc.)        |
| <b>Administration</b>   | Late Filings                     | System rule based on frequency and lateness of late filings  |
|                         | Complaints                       | System rule based on number (relative to plan size) and severity of complaints   |
|                         | Non-compliance                   | Manual input   |
|                         | Complexity of plan structure     | Flag based on existing data  |
|                         | Multijurisdictional plan         | Flag based on existing data  |
|                         | Benefits processing              | Manual input based on plan examination results   |
|                         |                                  |  |
| <b>Governance</b>       | Plan type                        | Flag based on existing data  |
|                         | Audit Report                     | Manual input based on issues identified in audit report  |
|                         | Policies and procedures          | Manual input including plan examination results  |
| <b>Sponsor/Industry</b> | Industry outlook                 | Manual input   |
|                         | Mergers/acquisitions/downsizing  | Manual input   |
|                         | Sponsor insolvency               | Manual input   |

## 2.4 Detailed Risk Assessments

As discussed earlier, detailed risk assessments are performed for plans or transactions based on the results of the risk indicator tool, as well as other plans on a selective basis. Such risk assessments are expected to provide the following outcomes:

- Full evaluation of the risks faced by a pension plan, taking into account the plan's specific circumstances (nature of liabilities, sponsor's financial strength, governance model, risk sharing arrangement, etc.) and any risk management practices the plan has in place;
- Classification of pension plans that are subject to detailed risk assessment into different risk quadrants within the Risk Response Model;
- Tracking of how risks are changing over time, including identification of emerging risks;
- Identification of plans whose risk profiles have changed over time.

Results of risk assessments could be used to provide direction and focus to the plan examination process. They would also allow for *ex-post* reviews of the risk assessment process and risk universe, assisting in future improvements to the regulatory approach.

Detailed risk assessments would be used as a tool to guide regulatory actions taken by FSCO. While there will be some structure in performing detailed risk assessments, they will be customized as needed to fit the particular circumstances of the plan or transaction being reviewed. It does not result in a standardized report.

In performing a detailed risk assessment, the elements from the risk universe will be prioritized based on what is deemed most relevant as well as the availability and quality of information. It is unlikely that all elements of the risk universe would be considered in any particular case.

It is intended that material concerns and issues arising from the detailed risk assessments would be communicated and shared with the plan administrator and, if relevant, other stakeholders as well. This provides an opportunity for the administrator to address identified concerns and issues through constructive dialogue. Further regulatory action, if any, would be guided by the outcome of such a process. It is believed that this approach would improve the transparency of the regulatory process.

Please see Appendix for illustrations of what a detailed risk assessment might entail.

## 2.5 Regulatory Powers and Tools

Regulatory tools are generally set out in legislation but can also include actions taken by the regulator to influence through moral suasion (e.g. stakeholder communication, educational material, guidance on industry best practices).

Regulatory powers and tools assist the regulator in performing its regulatory duties and influencing the actions of the regulated entities. These include powers and tools which:

- Enable the regulator to monitor plans to help identify plans that are at higher risk, for example through providing early warning signals.
- Help the regulator change the behavior of plan administrators and sponsors, which can include educational tools such as best practice guidance as well as deterrence tools that deal with known instances of non-compliance.

Powers which enable the regulator to monitor plans, particularly when the regulator indicates the reasons for monitoring and the risks being monitored, may also influence the behaviour of administrators since administrators know that their plans are being monitored.

The Framework is generally designed to be consistent with the powers of FSCO under the current Pension Benefits Act and regulations.

In reviewing the Framework and processes used by peer regulators in other jurisdictions, it was noted that some have other powers and tools available to them that FSCO does not have. Some of these powers and tools are mentioned in this document and may be recommended for future legislative reform. **Note, however, that FSCO does not have any authority to make legislative changes,** and therefore they are presented herein primarily for informational purposes.

The following diagram provides an overview of key regulatory tools for risk-based regulation. The proportionate nature of the tools is illustrated through the categories: Educate Monitor and Deter. For illustrative purposes, included are certain tools that currently do not exist and would require legislative change to bring about.



## 2.6 Data Sources

The data obtained by FSCO through plan filings is broadly consistent with those of leading risk-based peer regulators. As such the Framework does not recommend wholesale changes to plan filings although certain enhancements are discussed in this document.

The Framework also recommends that additional information could be collected outside the plan filings to assist with monitoring risks within the broader risk universe. As well, should FSCO obtain legal powers to collect additional information, such information can be used within the Framework.

This section considers three categories of data source enhancement:

- A. Existing data that can be used in an enhanced manner.
- B. New data to consider collecting absent legislative change
- C. New data that may be provided pursuant to legislative change

### **A. Existing Data That Can Be Used In an Enhanced Manner**

This includes information that is currently collected or available in some form, which can, for example, be used to enhance the risk indicator tool including:

- **Complaint information.** A process is currently being implemented to track complaint information and to categorize by severity. Metrics for tracking complaint information can be used to facilitate risk indicator reporting.
- **Unremitted contributions.** Plan trustees notify FSCO when required contributions are not made.
- **Late Filings and Applications.** Late filings are tracked in the system and can form part of the risk indicator reporting. Tracking of late applications may require enhancement to be used effectively as a risk indicator.
- **Examinations.** Examinations can be used to obtain additional information on plans, particularly in risk areas where little information is available on plan filings (e.g. administration and governance). Key results of examinations can be made available within the system.
- **Audit Reports.** FSCO receives audited financial statements for pension plans where an audit is required. The audit results, including disclosures in the notes in financial statements, can be used in the risk assessment process.

### **B. New Data to Consider Collecting Absent Legislative Change**

**Industry and Sponsor Intelligence.** The Framework recommends that an intelligence process be established to monitor industry and sponsor risks.

- **Industry risks.** Examples of data that can be monitored for industry risks include forward looking (e.g. research reports on industry) and backward looking information (e.g. past insolvency rates by industry). Availability of data and cost considerations may impact the choice of sources of industry risk data.
- **Sponsor risks.** Risks for certain specific sponsors can be monitored. It would be impractical to actively monitor all sponsors, and accordingly FSCO would focus on the sponsors of plans that have been designated as high risk through a detailed risk assessment. Examples of data sources include news alerts related to sponsors (e.g. news aggregators such as Google news alerts and RSS feeds, subscription services such as Dow Jones Factiva). As well, where sponsors are public companies with issued debt, credit ratings are typically readily available and these can be monitored. In certain circumstances, for example when funding shortfalls are significant and there are concerns about sponsor viability, FSCO may wish to acquire credit reports for privately held companies.

**External Scans and Monitoring for Emerging Trends and Risks.** This would include information that would be used to refine and enhance the approach to risk-based regulation. A number of sources may be used in combination, including ongoing interaction with the industry; participation in forums and communication with peer regulators; and scanning external information and reports.

**Additional Data Concerning Plans and Service Providers.** While FSCO often obtains and records information identifying service providers to plans, FSCO could consider requiring this information to be provided, for example via AIRs. This would allow FSCO to record, for all plans, the details of who provides investment advice and actuarial services, allowing this data to be analyzed if required (e.g. if FSCO wanted to know what plans a particular investment firm advises). This type of information should normally be available to the plan administrator as part of its governance process of monitoring and overseeing its service providers.

### **C. Potential New Data Pursuant to Legislative Changes**

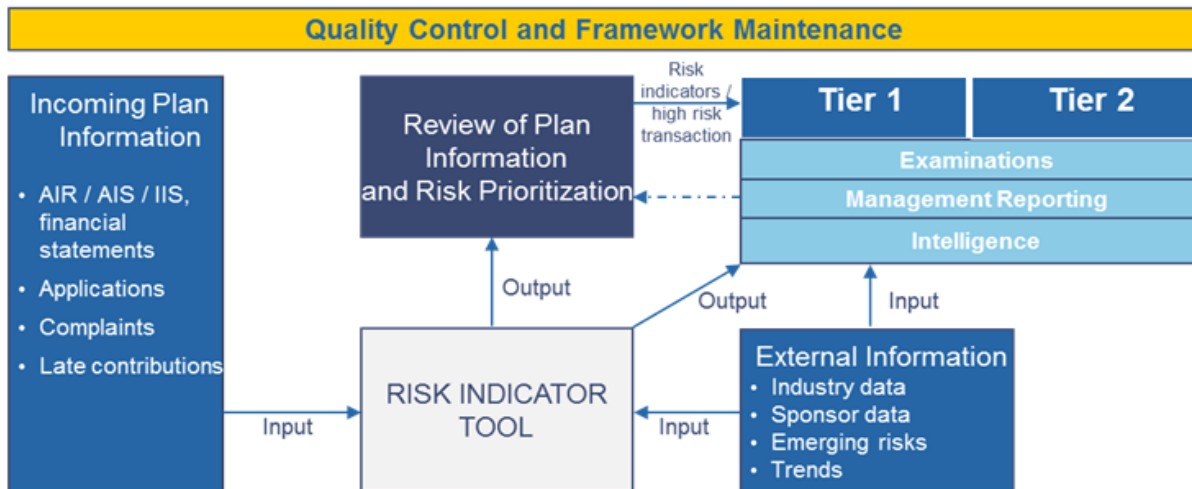
There are a number of areas where peer regulators obtain information on pension plans outside the regular filing process that FSCO could introduce, and which may require legislative change. Examples of such new data include:

- **Notifiable events.** These are predefined significant events that require reporting by plan administrators / sponsors, such as breaches of bank covenants, senior management convictions, sponsors moving outside the jurisdiction, and can be used as early warning signals of potential problems.
- **Whistleblower reports.** These are reports of legislative breaches made by sponsors, administrators or plan advisors. Whistleblower obligations can be set out under the law.
- **Governance / Risk Management Information.** Other jurisdictions require pension plans to provide details of their governance arrangements or require external audits of risk management processes.
- **Other information that could be subject to an external assurance process.** FSCO could require disclosure of information such as related party transactions, conflicts of interest, and investment holdings outside quantitative limits, and could explore whether this could be provided through an external assurance process.

## 2.7 Process Overview

The following chart provides an overview of the regulatory process flow.

Figure 2.6



A key component of the risk monitoring process is a Risk Indicator Tool (RIT) that uses incoming plan information as input. Initially, the RIT will use information from existing FSCO data such as the Annual Information Return (AIR), Actuarial Information Summary (AIS), Investment Information Summary (IIS), late filing information, plan size, plan type, late or unremitted contributions, plan demographics, whether collectively bargained, multi-jurisdictional, frequency and severity of complaints, as well as complexity of plan structure.

Inputs to this tool will be automated to the extent practical. Based on pre-defined algorithms, the RIT presents the outcome as a priority list that ranks the plans based on the risk scores calculated by the RIT.

A Tier 1 plan risk review would be performed<sup>2</sup> in accordance with the order set out in the priority list generated from the RIT. The purpose of Tier 1 review is to validate the results from the RIT and to provide a preliminary assessment of the plan's exposure to risks in terms of probability and impact. Based on the results of risk assessment, the reviewer would assign the plan into one of the four risk quadrants of the Regulatory Response Model as described in Section 2.1. The outcome of Tier 1 review is used to guide FSCO staff as to what type of regulatory response should be undertaken.

A plan that has been assessed as being exposed to or exhibiting significant risks and assigned to the upper-right quadrant would be subject to a Tier 2 review. Based on the judgment of the Tier 1 reviewers, some plans in the "moderate risk" category (i.e., lower-right or upper-left quadrant) could also be subject to a Tier 2 review.

Where a Tier 2 review is required, a detailed risk assessment would be performed to confirm the plan's risk classification. If the risk classification is confirmed, the specific plan will be case-managed by a dedicated team of FSCO staff consisting of a case manager, front-line pension officers as well as actuarial, investment, legal and/or other professional support. The role of the case management team is to conduct on-going monitoring of high risk plans, which may include recommending approval of specific applications by the Superintendent, periodic risk assessments, interactions with plan administrators and their advisors as well as regulatory interventions, if warranted.

- Additional Tier 2 activities may include:
  - On site examinations of pension plans linked to the risk assessment process.
  - Management reporting on risk-based activities such as those relating to high risk plans, trends and significant issues.
  - An Intelligence process that includes review news feeds and general industry data, as well as monitoring of internal data such as results of on-site examinations and risk assessments for trends and issues. The acquired information is used to identify any emerging risk factors that are relevant to pension risk monitoring.

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<sup>2</sup> Applications that require Superintendent's approval (e.g., wind-ups, asset transfers etc.) are routinely subject to a standard review for legislative and regulatory compliance, which forms part of the Tier 1 review process. If material non-compliance is identified in a plan situation, the issue may be escalated to a Tier 2 review.

The Framework operates with ten key business processes that can be described as follows:

Table 2.3

| Business Process                          | Summary Definition  |
|---|---|
| Incoming Plan Information                 | The receipt of plan information (filings, applications, complaints etc.), the initial review for completeness and routing to the appropriate person / group   |
| Intelligence                              | Review of external information (e.g. media reports) and internal information (e.g. outputs from risk assessments), and filtering to determine relevant information to disseminate   |
| Risk Indicator Tool                       | The process by which risk indicators are determined and kept current, and any changes made to the screening process   |
| Routine Review                            | The review of routine applications, filings, complaints, approval/rejection of applications, and identification of higher risk items.   |
| Tier 1 Review                             | Review to assess risk related to a plan or transaction, in terms of probability and impact as well as legislative and regulatory compliance, and to assign the plan or transaction into one of the four quadrants of the Regulatory Response Model. |
| Tier 2 Review                             | Consists of: <ul style="list-style-type: none"> <li>• Detailed risk assessment</li> <li>• Process by which high risk applications / plans / issues are case managed.</li> </ul>   |
| Examinations                              | On site examinations of pension plans linked to the risk assessment process.  |
| Management Reporting                      | Oversight by senior management through reporting on developments relating to higher risk plans / issues, trends and key performance indicators  |
| Quality Control and Framework Maintenance | Oversight of methodology of risk-based regulation including ensuring it is applied appropriately and consistently through quality control processes and it is revised and updated appropriately   |
| Education and Engagement                  | Providing education internally and externally on the risk-based regulation approach, including communication of expectations to stakeholders and soliciting their feedback and input  |

### ***3. Medium Term Strategy***

The proposed Framework is a significant change to the way in which FSCO regulates pension plans. The full implementation of the Framework will take time, and flexibility will need to be built into transition plans as implementation is phased in.

To transition to the new Framework, the principal activities FSCO plans to carry out over the next three years are:

- Enhance existing risk-based processes, including integrating the monitoring and review of funding and investment risks, applying risk indicators such as late filings and stakeholder complaints for risk monitoring, and strengthening on-site examinations with focus on administration and governance risks.
- Enhance stakeholders' understanding of FSCO's risk-based approach through ongoing engagement including education and communication.
- Establish quality control and maintenance process that includes the oversight and update of the risk-based methodology and application.

### 3.1 Framework Transition

FSCO will streamline its existing risk-based processes by integrating the monitoring and review of funding and investment risks. Focus will be placed on, but not limited to, the review of appropriateness of actuarial assumptions and methods, contributions remittance, asset mix policy in relation to the liabilities of the plan, and the measurement of fund performance relative to appropriate benchmarks.

In addition to the AIR, FSCO will introduce and implement e-filings of the IIS, PBGF and AIS to facilitate the collection of data necessary for risk monitoring. It will use other evidence such as late filings, stakeholder complaints, and news alerts, for risk monitoring and assessment.

Well governed pension plans are likely to be better administered, have greater awareness of financial risk, and to better represent the interests of plan members. FSCO intends to strengthen its on-site examinations by placing focus on identifying instances of poor governance and administration, and working with the administrators to address the shortcomings related to their plans.

At the same time, FSCO will take steps to promote, on an industry-wide basis, the knowledge and understanding of the governance requirements for pension plans (e.g., information session on CAPSA governance guidelines, best practices of well-governed plans).

### 3.2 Stakeholder Education and Engagement

A key element of risk-based regulation is the communication of the regulator's expectations to stakeholders, including plan administrators, sponsors and their advisors, and plan beneficiaries through ongoing engagement including education and communication.

There are two elements of education and communication:

- Education and communication of the changes to the regulatory approach as FSCO expands its application of risk-based regulation.
- On-going communication of the outcome of risk-based regulation as it is applied.

Extensive consultations with stakeholders and the industry will be required during the period of transition. Consultation activities could include:

- Working collaboratively with stakeholders and the industry to design and develop a comprehensive risk-based regulation framework.
- Providing information about the risk-based regulatory approach and how it is to be applied to pension plans.
- Communication with a broader public audience to ensure that the regulatory approach and its limitations are properly understood.

Ways in which ongoing education and communication may be achieved include:

- Providing periodic reports on the outcome of risk-based activities to industry on regulated areas. Currently, FSCO provides annual reports on funding and investment monitoring activities. This will be expanded to include other risk monitoring activities.
- Providing reports on the application of risk-based regulation in general including aggregate risk profiles, common issues, cases escalated to enforcement, the use of regulatory tools, PBGF claims information, etc.
- Identifying areas of potential concern within the pension system, performing thematic reviews and reporting to the industry on the results.
- Providing guidance to pension administrators and sponsors on a variety of areas, especially in regard to plan governance. This may be performed in conjunction with other pensions regulators (e.g. through CAPSA) or through FSCO initiatives.
- Engaging in industry forums, conferences, and speaking engagements.
- Encouraging a customer service approach to contact with pension plans which may include more personal interaction (e.g. face to face meetings, telephone calls) in place of written correspondence.

- Providing regular updates through website postings, news releases, webinars, email newsletters on regulatory and policy developments, including key issues, emerging trends, enforcement actions taken by FSCO.
- Broadening the potential scope of on-site examinations, and ensuring linkage between examination of plans and outputs from the risk assessment process.

### 3.3 Quality Control and Framework Maintenance

A key element of effective application of the Framework is recognizing that:

- Its implementation is subject to human judgment and hence its application can vary.
- Staff training to ensure common understanding of the risk-based regulatory approach and its application is essential.
- Quality control procedures need to be put in place to ensure appropriate and consistent application.
- Update of the Framework will be needed as the industry practices change, new risks emerge and priority of existing risks changes.

It is expected that the Quality Control and Framework Maintenance process will include the following activities:

- Setting benchmarks or key performance indicators to monitor and measure the effectiveness of risk indicators in identifying higher risk plans, and modifying them as appropriate.
- Maintaining the Framework including periodically revisiting and updating the methodology, risk definitions and assessment criteria.
- Coordinating the identification of emerging or increasing risks and developing approaches to address those risks (e.g. identifying areas for thematic reviews, providing guidance / training / updates to colleagues, recommending changes to the application of the Framework).
- Ensuring, through leading initiatives or coordination / participation with others, appropriate communication and education to the industry regarding the risk-based approach and regulatory expectations.
- Liaison with relevant IT groups to ensure that the system of risk-based regulation is appropriately supported by technology.
- Maintaining network of strategic relationships within FSCO, the industry, national and international regulatory bodies.
- Reporting to senior management on the status and effectiveness of risk-based regulation.

These measures will be implemented once the Framework has become operational and as we learn more about the risk profile of the pension plan universe.

## ***Appendix - Illustrations of Detailed Risk Assessment***

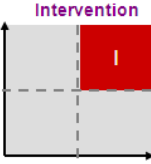
For the purposes of this Appendix, we have assumed that a risk indicator tool with pre-defined algorithms presents the outcome of various risk indicators in a “traffic light” format, as shown in Section 2.7 (illustrative only and subject to change).

Based on the output from the risk indicator tool, a Tier 1 review is performed to assign a plan into one of the four quadrants of the Regulatory Response Model shown in Section 2.1. If the plan is classified in the upper-right quadrant, it will be subject to a Tier 2 review. In addition, there may be situations where a Tier 2 review is warranted even for plans classified in the other quadrants. In the Tier 2 review process, a detailed risk assessment (DRA) would be performed to confirm the risk classification and to guide FSCO in determining the appropriate regulatory actions.

As part of the DRA process, FSCO may seek additional information to better assess the risks to the pension plan. Request may be made directly to the administrator or the employer, but the information gathering process would be broad and dependent on the specific situation.

It should be noted that these examples have been provided purely for illustrative purposes and any resemblance to an existing registered pension plan is coincidental.

**Example 1 – Plan A:** Suppose the risk indicator tool presented the following results for Plan A and that the Tier 1 review process assigned Plan A to the upper right quadrant.

| Plan A                   | Regulatory Response Model Classification: |   |
|--------------------------|---|---|
|                          |   |  |
| Risk Indicator           | Rating                                    | Notes   |
| AIS Flags                |   | Solvency ratio 65%  |
| Late contributions       |   |   |
| IIS Flags                |   | Performance below benchmark, A/L mismatch   |
| Late filings             |   | History of late filings of IIS and FS   |
| Complaints               |   |   |
| Non-compliance           |   |   |
| Complexity of plan       |   |   |
| Benefit processing       | N/A                                       |   |
| Audit report             | N/A                                       |   |
| Multijurisdictional plan |   | BC, AB, ON and QC   |
| Policies and procedures  | N/A                                       |   |
| Industry outlook         |   | Auto parts manufacturing  |
| Mergers / acquisitions   | N/A                                       |   |
| Sponsor insolvency       |   | Media alerts on potential CCAA  |

**Detailed Risk Assessment**

The plan would be subject to a Tier 2 review. The DRA takes into account the following information.

**Key Plan Data:**

|                               |  |                   |                            |
|-------------------------------|--|-------------------|----------------------------|
| Benefit type                  | Collectively bargained career average plan |                   |                            |
| Membership profile            | Number                                     | Avg Age / Service | Avg Salary / Pension       |
| - Active                      | 350  | 46 / 16           | \$45,800 / \$5,400         |
| - Retired                     | 90   | 72                | \$4,700                    |
| - Other                       | 130  | 41                | \$2,000                    |
| Market value of assets        | \$12,533,000                               |                   |                            |
| Financials as of Dec 31, 2009 | <b><u>Going-concern</u></b>                |                   | <b><u>Solvency</u></b>     |
| Actuarial value of assets     | 14,417,000                                 |                   | 12,363,000                 |
| <u>Plan liabilities:</u>      |  |                   |                            |
| - Active                      | 9,161,000                                  | 63%               | 12,996,000 67%             |
| - Retired                     | 4,244,000                                  | 29%               | 4,887,000 25%              |
| - Other                       | <u>1,158,000</u>                           | <u>8%</u>         | <u>1,626,000</u> <u>8%</u> |
| - Total                       | 14,563,000                                 | 100%              | 19,509,000 100%            |
| Surplus (Deficit)             | (146,000)                                  |                   | (7,146,000)                |
| Contribution requirements     | <u>Year 1</u>                              | <u>Year 2</u>     | <u>Year 3</u>              |
| - Total normal cost           | 665,000                                    | 665,000           | 665,000                    |
| - Special payments            | 911,000                                    | 790,000           | 667,000                    |

Through the DRA process, the following elements of the risk universe have been considered:

| Risk Area                     | Analysis / Commentary  |
|-------------------------------|--|
| <b>1. Funding Risk</b>        |  |
| a) Actuarial basis            | The actuarial basis used for both the going-concern and solvency valuations are reasonable   |
| b) Plan size vs. Sponsor size | The solvency liability of \$19.5 million represents approximately 2% of the sponsoring company's assets. And the deficit of \$7.1 million represents 0.7% of the company's assets.<br>The \$7.1 million deficit does not appear to be a material amount relative to the company's recent cash flow and revenue figures. However, due to the deterioration in business conditions, this may be an issue in the near future. |

| Risk Area  | Analysis / Commentary   |
|--|---|
| c) Sponsor size vs. Contribution requirements                      | The normal cost represents 4.2% of the company's active payroll while the special payment represents 5.7% of payroll, for a total of close to 10%. However, the annual contribution requirement does not appear to be a material amount relative to the company's recent cash flow and revenue figures.   |
| d) Other   | The plan sponsor is a subsidiary of an US-based parent. There does not seem to be any evidence that the parent company is in difficulty at this time. The US parent is a public company and has a very large market capitalization. It is not known at this time if any parent company guarantee exists should the Canadian subsidiary experience financial difficulty. FSCO should inquire into this matter further. |
|  |   |
| <b>2. Investment Risk</b>  | The pension fund has an asset mix target of 60% equity/40% fixed income and its actual asset mix is reasonably close to this. The assets are managed by Manager ABC in diversified pooled funds. It is invested in a traditional manner without the use of leverage or esoteric strategies.   |
| a) Matching risk<br>- Asset mix vs. Demographics                   | The current asset mix does not exhibit a material mismatch. Take action if necessary to ensure investment policy is reviewed in the event of material plan changes (e.g. windup or partial windup). Monitor to ensure plan does not take on undue risk to try and close the windup deficit.   |
|  |   |
| <b>3. Administration Risk</b>                                      | There has been no plan examination conducted for this plan, so there is no direct information on matters like staffing concerns, benefit processing, recordkeeping, etc.  |
| a) Errors / complaints   | Levels of member complaints and resolution efforts are acceptable.  |
| b) Multi-jurisdictional plans                                      | Multi-jurisdictional plan with members in BC, AB, ON and QC.  |
| c) Late filings / errors in filings                                | There is a history of requests for filing extensions for the financial statements and IIS. As well, there have been some instances of errors in filings, although it appears that all of these have been resolved.  |
| d) Regulatory compliance   | No issues have been found.  |
|  |   |
| <b>4. Governance Risk</b>  | There has been no plan examination conducted for this plan, so there is no direct information to assess governance risk.  |
| a) Use of qualified outsourced providers and oversight by the plan | No known issues with respect to the service providers engaged by the administrator.   |
| b) Incidence and nature of legislative breaches                    | No known breaches.  |
|  |   |

| Risk Area  | Analysis / Commentary   |
|--|---|
| <b>5. Sponsor/Industry Risk</b>                                |   |
| a) Continuity / financial strength of pension plan sponsor     | Due to media alerts on potential CCAA application, there are major concerns about the financial strength of the plan sponsor. Therefore, proactive monitoring is called for along with direct interaction/dialogue with the administrator/sponsor to ensure that funding requirements are met promptly and that investment of pension fund is prudent in the circumstances. |
| b) Business outlook of Industry sector; industry reports       | Plan sponsor's business is in the auto sector. Outlook has improved since financial crisis in 2008. However, there continue to be concerns about the economic recovery in general and the auto sector in particular. The big 3 US automakers seem to have favourable outlooks going forward – which would be a direct benefit to the auto sector.                           |
| c) General economic environment                                | Still have concerns about housing and employment situation, especially in the US. This likely will have direct impact on sponsor's business.  |
| d) Mergers / acquisitions                                      | No specific information about M&A activity, although this is viewed as a distinct possibility.  |
| e) Incidence and nature of litigation against plan and sponsor | No media reports of any legal actions.  |
|  |   |
| <b>6. Other Matters</b>  |   |
| a) PBGF coverage   | Most if not all of the benefits provided are covered by the PBGF – members' accrued pensions are typically under the coverage limit. No benefit improvements within the last 3 years.   |
|  |   |

### **Conclusions and Actions**

There is a risk of sponsor insolvency which would leave the plan with a windup deficit of approximately \$7 million as of the last valuation date, December 31, 2009. The plan is significantly underfunded on a solvency basis with a solvency funded ratio of approximately 65%. However, because of the level of pensions, Ontario members would have most, if not all, of their pensions covered by the PBGF. The PBGF is exposed to a modest claim. There would be a risk to non-Ontario members of a 35% reduction in their benefits should the plan windup without any additional contributions by the sponsor.

## Risk Based Regulation Framework

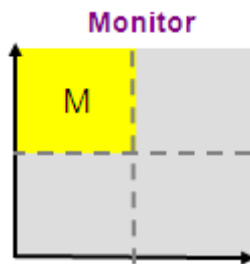
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Since the plan sponsor is up to date in remitting required contributions to the fund, the emphasis for FSCO is to ensure that the sponsor continue to make the required contributions to the plan in a timely manner and to take further action should contributions become delinquent. Of course, the actuarial valuation basis on which the contributions are based must be appropriate.

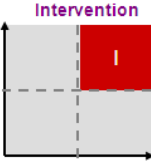
Staff should also engage in dialogue with the administrator and employer to better understand the company business situation and to also communicate our concerns and remind the sponsor of his obligations under the PBA. Staff should also determine if possible whether the parent company intends to stand behind the pension obligations of the plan sponsor (its subsidiary).

The investments should also be closely monitored to ensure that no undue risks are taken by the sponsor in an attempt to eliminate the deficiency.

Reclassify to the “Monitor” quadrant of the Regulatory Response Model:



**Example 2 – Plan B:** Suppose the risk indicator tool presented the following results for Plan B and that the Tier 1 review process assigned Plan B to the upper right quadrant.

|                          |  |   |   |
|--------------------------|--|---|---|
| <b>Plan B</b>            | <b>Regulatory Response Model Classification:</b> |   |  |
| <b>Risk Indicator</b>    | <b>Rating</b>                                    | <b>Notes</b>  |   |
| AIS Flags                |  | Solvency ratio 65%, very large solvency deficiency, excluded benefits |   |
| Late contributions       |  |   |   |
| IIS Flags                |  | Performance concerns, derivatives, alternative investments            |   |
| Late filings             |  |   |   |
| Complaints               |  |   |   |
| Non-compliance           |  |   |   |
| Complexity of plan       |  | Public sector plan, fairly complex employees from many employers      |   |
| Benefit processing       | N/A  |   |   |
| Audit report             | N/A  |   |   |
| Multijurisdictional plan |  |   |   |
| Policies and procedures  | N/A  |   |   |
| Industry outlook         |  |   |   |
| Mergers / acquisitions   | N/A  |   |   |
| Sponsor insolvency       |  |   |   |

**Detailed Risk Assessment**

The plan would be subject to a Tier 2 review. The DRA takes into account the following information.

**Key Plan Data:**

|                                    |  |                   |                        |          |
|------------------------------------|--|-------------------|------------------------|----------|
| Plan type                          | Large public sector plan.                                |                   |                        |          |
| Benefit type                       | Collectively bargained final average plan, fully indexed |                   |                        |          |
| Membership profile                 | Number   | Avg Age / Service | Avg Salary / Pension   |          |
|                                    | - Active   | 25,000            | 45 / 11.0              | \$55,000 |
|                                    | - Retired  | 15,000            | 72                     | \$13,000 |
|                                    | - Other  | 4,000             | 46                     | \$2,800  |
| Market value of assets             | \$47.8 billion   |                   |                        |          |
| Financials as of December 31, 2009 | <b><u>Going-concern</u></b>                              |                   | <b><u>Solvency</u></b> |          |
| Actuarial value of assets          | \$6.7 B  |                   | 5.9B                   |          |
| <u>Plan liabilities:</u>           |  |                   |                        |          |
| - Active                           | 3.9 B  | 57%               | \$3.6 B 57%            |          |
| - Retired                          | 2.7 B  | 40%               | 2.6 B 41%              |          |
| - Other                            | <u>0.2 B</u>   | <u>3%</u>         | <u>0.1B</u> <u>2%</u>  |          |
| - Total                            | \$6.8 B  | 100%              | \$6.3 B 100%           |          |
| Surplus (Deficit)                  | \$ (0.1) B   |                   | \$ (0.4) B             |          |
| Contribution requirements          | <u>Year 1</u>  | <u>Year 2</u>     | <u>Year 3</u>          |          |
| - Total normal cost                | 275,000,000  | 287,000,000       | 300,000,000            |          |
| - Special payments                 | 3,000,000  | 13,000,000        | 14,000,000             |          |

Through the DRA process, the following elements of the risk universe have been considered:

| Risk Area                     | Analysis / Commentary  |
|-------------------------------|--|
| <b>1. Funding Risk</b>        |  |
| a) Actuarial basis            | The actuarial basis used for the going-concern valuation is on the aggressive end of the range. For the solvency valuation, they have excluded indexing benefits (excluded benefits from the solvency liabilities are \$2.6 B). Additionally due to the large plan size and indexed pensions, the estimated annuity purchase price for pensions and deferred pensions have been estimated to be the same as for a lump sum commuted value calculation – this may be inappropriate (although there is no definitive standard or practice how these should be valued). |
| b) Plan size vs. Sponsor size | For this plan, the participating employers are in the public sector and are large relative to the plan size.   |

| Risk Area                                     | Analysis / Commentary   |
|---|---|
| c) Sponsor size vs. Contribution requirements | The employer required contributions represent approximately 8% to 8.5% of payroll. Members are required to contribute an equal amount. Given the nature of the employers, there is no significant risk of an inability by employers to make the required contributions.   |
| d) Demographics                               | The plan is comprised of a diverse mix of members in terms of earnings and service.   |
| e) Other                                      | Given that the participating employers are in the public sector, there is a very low probability of a plan windup. For the same reason, there is a low probability that the employers will be unable to make the minimum required contributions under the PBA. We do not have information about the impact on the plan if a participating employer ceases its participation. FSCO should research this.   |
| <b>2. Investment Risk</b>                     | <p>The pension fund investments are considered very sophisticated, including allocations to real estate, infrastructure and private equity. The initial system screen indicated a potential risk situation due to performance issues, use of derivatives and investment in alternative asset classes.</p> <p>The level of complexity, volatility and potential liquidity are valid concerns for this plan.</p> <p>The current information we collect through financial statements and the IIS do not allow us to assess this plan very effectively due to the varied asset classes as well as the difficulty in determining appropriate benchmarks for the non-traditional investments (e.g. infrastructure or private equity). The plan does have qualified investment professionals on staff and has in place systems and processes for monitoring and assessing its investments. As well, the plan itself is audited annually and prepares a report which includes investment performance statistics and benchmark statistics. The annual audit includes an assessment of their internal controls and risk management processes and systems.</p> <p>Although the asset mix is on the aggressive side (relative to the plan demographics) and the plan uses derivatives and other sophisticated financial instruments, they have on staff investment professionals and have established documented procedures for managing and monitoring their investments. As such, they appear to follow prudent investment and risk management practices.</p> |

| Risk Area                           | Analysis / Commentary   |
|-------------------------------------|---|
| <b>3. Administration Risk</b>       | <p>There has been no plan examination conducted for this plan, so there is no direct information on matters like staffing concerns, benefit processing, recordkeeping, etc. Nevertheless, the fact that an organization exists with plan administration as one of its primary purposes suggests that the administration risk is low for this plan.</p> <p>The plan maintains a website through which it can communicate with its members and with other stakeholders.</p> |
| a) Errors / complaints              | Levels of member complaints and resolution efforts are acceptable.  |
| b) Late filings / errors in filings | No material issues noted.   |
| c) Regulatory compliance            | No issues have been noted.  |
| <b>4. Governance Risk</b>           | <p>There has been no plan examination conducted for this plan, so there is no direct information to assess governance risk.</p> <p>However, they have a well-developed framework for plan governance and have documented its governance structure and processes. The board of directors has representation from both the employers and the members. The plan's governance appears to be functioning effectively.</p>  |
| <b>5. Sponsor/Industry Risk</b>     | <p>There is a very low probability of any issues related to sponsor risk (or employer risk in this case) given that the participating employers are all public sector entities.</p>   |

### **Conclusions and Actions**

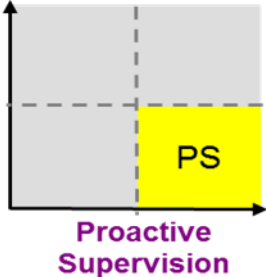
This plan was initially assigned to the upper right quadrant by the Tier 1 review process. The primary reasons were the low transfer ratio, very large windup deficiency, complexity of the plan and investment related concerns.

The detailed risk assessment undertaken in the Tier 2 review process indicates that there is a very low probability of plan failure and that the issues related to plan complexity and investments are being managed effectively by the plan administrator. Nevertheless, due to the large number of plan members and the high profile nature of the plan, any significant negative event affecting the plan would potentially cause a concern and affect a large number of individuals. Therefore, it would be prudent to re-classify this plan to be in the "Proactive Supervision" quadrant and take steps to be aware of issues concerning the plan on a timely basis.

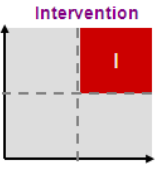
**Risk Based Regulation Framework**

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The plan is currently in full compliance with the PBA and FSCO should focus on being up-to-date about the plan’s circumstances through regular periodic monitoring efforts.



**Example 3 – Plan C:** In this example, a pension plan is being terminated and there is an application to wind-up the plan. The risk indicator tool and Tier 1 review classifies this as a high risk transaction to be reviewed in Tier 2.

|                          |  |  |   |
|--------------------------|--|--|---|
| <b>Plan C</b>            | <b>Regulatory Response Model Classification:</b> |  |  |
| <b>Risk Indicator</b>    | <b>Rating</b>                                    | <b>Notes</b>   |   |
| AIS Flags                |  | Transfer ratio 55%, large solvency deficiency of \$130 million             |   |
| Late contributions       |  | Contributions are up-to-date   |   |
| IIS Flags                | N/A  |  |   |
| Late filings             | N/A  |  |   |
| Complaints               |  |  |   |
| Non-compliance           | N/A  |  |   |
| Complexity of plan       |  | Moderate complexity, different classes of employees get different benefits |   |
| Benefit processing       | N/A  |  |   |
| Audit report             | N/A  |  |   |
| Multijurisdictional plan |  |  |   |
| Policies and procedures  | N/A  |  |   |
| Industry outlook         |  | Steel industry, currently in down cycle                                    |   |
| Mergers / acquisitions   | N/A  |  |   |
| Sponsor insolvency       |  |  |   |

**Detailed Risk Assessment**

The plan would be subject to a Tier 2 review. The DRA takes into account the following information.

The plan sponsor’s business is in the steel industry. The industry appears to be at a low point in the business cycle with media reports of shrinking global demand and a poor outlook over the next 12 – 18 months. The company is also undergoing a major restructuring effort which

includes a significant downsizing. As part of its restructuring plan, the company is winding up the pension plan. The windup report as at December 31, 2010 provides the following information:

**Key Plan Data:**

|                                    |  |                   |                           |
|------------------------------------|--|-------------------|---------------------------|
| Plan type                          | Single employer  |                   |                           |
| Benefit type                       | Collectively bargained flat benefit plan with generous early retirement provisions |                   |                           |
| Membership profile                 | Number   | Avg Age / Service | Avg Salary / Pension      |
| - Active                           | 800  | 45 / 16.3         | \$16,800                  |
| - Retired                          | 500  | 61                | \$24,800                  |
| - Other                            | 100  | 47                | \$3,300                   |
| Market value of assets             | \$170.0 million  |                   |                           |
| Financials as of December 31, 2010 | <b><u>Going-concern</u></b>  |                   | <b><u>Wind-Up</u></b>     |
| Actuarial value of assets          | Not relevant   |                   | 169.8 M (net of expenses) |
| <u>Plan liabilities:</u>           |  |                   |                           |
| - Active                           | n/a  | \$150.2 M         | 47%                       |
| - Retired                          | n/a  | 156.0 M           | 49%                       |
| - Other                            | n/a  | <u>10.9 M</u>     | <u>4%</u>                 |
| - Total                            | n/a  | 317.1 M           | 100%                      |
| Surplus (Deficit)                  | n/a  |                   | \$(147.3) M               |
| Contribution requirements          |  |                   |                           |
| - Special payments over 5 years    | 30.1 M per year  |                   |                           |

Through the DRA process, the following elements of the risk universe have been considered:

| Risk Area                                     | Analysis / Commentary  |
|---|--|
| <b>1. Funding Risk</b>                        |  |
| a) Actuarial basis                            | The windup basis is in accordance with prescribed requirements.  |
| b) Plan size vs. Sponsor size                 | The windup deficit of \$147.3 million is a significant amount for the sponsor, especially given the current business difficulties.   |
| c) Sponsor size vs. Contribution requirements | The minimum amount if funded over 5 years is \$30.1 million per year. Under normal business conditions, it appears that a \$30.1 million cash contribution requirement would be manageable. The normal cost from the prior valuation was \$3.5 million. Given the difficulties faced by the sponsor and also the business conditions faced by the steel industry, there is a significant funding risk of the sponsor not making the required contributions or not being able to fully fund the deficit within 5 years. |
|   |  |
| <b>2. Investment Risk</b>                     | <p>The pension fund investments are broadly diversified and managed by investment professionals. There are significant allocations to equities, both domestic and foreign, which represent approximately 70% of the total portfolio.</p> <p>Due to the windup, there is a significant mismatch risk between how the liabilities are determined versus the assets backing them. Going-concern scenarios are irrelevant and the focus should be on windup and how to fully fund the windup deficit.</p>                  |
|   |  |
| <b>3. Administration Risk</b>                 | There has been no plan examination conducted for this plan, so there is no direct information on matters like staffing concerns, benefit processing, recordkeeping, etc. Given that a windup is intended, some review of benefit processing accuracy and recordkeeping practices would be advisable. There have been no unusual levels of member complaints logged and plan filings have been received on time.  |
|   |  |
| <b>4. Governance Risk</b>                     | There has been no plan examination conducted for this plan, so there is no direct information to assess governance risk. The activities to finish the windup and settle benefits will likely be delegated to a service provider.   |
|   |  |
| <b>5. Sponsor/Industry Risk</b>               | There is a possibility that the plan sponsor could become insolvent before fully funding the windup deficit.   |
|   |  |
| <b>6. Other Risks</b>                         |  |
| a) PBGF Coverage                              | The average pension to retired members is more than double the amount covered by the PBGF and the average accrued pension for active members is about 40% higher than the PBGF covered amount. Therefore if the sponsor does not fully fund the windup deficit then there could be a large reduction to members' pensions. In addition, there is a large potential exposure for the PBGF.  |

**Conclusions and Actions**

This transaction was initially flagged as a “high risk” transaction by the risk indicator tool and Tier 1 review process. The primary reasons were the low wind up funded ratio, very large windup deficit, and the negative business/industry outlook.

The plan is significantly underfunded on a windup basis with a windup funded ratio of approximately 54%. There is a risk of sponsor insolvency which would leave the plan with a windup deficit of approximately \$147 million as of December 31, 2010. Furthermore, the level of pensions indicates that members would be at risk of substantial reductions since a significant percentage of their pensions exceed the PBGF limit.

Of concern is the investment risk (primarily matching risk) and FSCO should take whatever measures it can to minimize the investment risk in the plan. This includes discussions with the administrator about restructuring the investment portfolio to more closely match the liabilities of the plan.

Another risk that FSCO can try to manage is the funding risk associated with late or unremitted contributions. FSCO should ensure that the sponsor continues to make the required contributions to the plan for funding the windup deficit within the prescribed timelines. Prompt action should be undertaken if non-compliance is identified.

The “high risk” classification for this transaction is confirmed. A dedicated team is established to manage the wind up of the plan.

