

**The Actuarial Profession**  
making financial sense of the future

## **Pensions, benefits and social security colloquium 2011**

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**Guidelines for social security actuaries**

Strengthening actuarial reporting accountability process

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## **Presentation –Strengthening actuarial reporting accountability process**

- Brief history of Canada Pension Plan (CPP) Reform
- Increase frequency of actuarial reports
- Consultations with expert on assumptions (*ISAP 3.1.2*)\*
- Independent peer review of reports and processes (*ISAP 3.2*)
- Introduction of self-adjustment mechanisms (*ISAP 4.1.3*)
- ISSA Good Governance Guidelines

\* DRAFT (V6) International Standard of Actuarial Practice

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## History – In 1996, the CPP was considered unsustainable over the long term

### Contribution rate was projected to increase from 5.85% to 14.2%

- Main guiding principles of 1997 CPP reform
  - Government must tighten administration
  - Government must monitor changing economic, demographic, and other circumstances which can affect the CPP
  - CPP must be affordable, sustainable and fair across generations

### Major changes

- Contribution rate was increased, future growth of benefits was reduced, the financing method was changed, and the CPP Investment Board was created.
- Increase frequency of valuations and financial reviews
- Consultations with experts on assumptions
- Establishment of regular independent peer reviews
- Introduction of self-adjustment mechanisms

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## Increase frequency of actuarial reports

### Actuarial report produced every three years instead of five

- Finance ministers' review aligned with the actuarial report:
  - First year used to prepare the actuarial report;
  - Second year used by the finance ministers to review the CPP and make recommendations based on the valuation report. They can decide to do nothing or to announce changes to either contributions or benefits; and
  - Third year is used to implement changes (e.g., legislation, regulations ,etc.) on any recommended changes, if necessary.
- Shorter formal review process was put in place to ensure governments monitor changing economic, demographic and other circumstances and act promptly on those changes.
- Supplemental actuarial reports are also prepared when a Bill to amend the CPP is introduced.

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## Consultations with experts on assumptions (ISAP 3.1.2) – Improve assumptions setting

### While preparing for the actuarial valuation, the OCA

- Conducts a CPP interdisciplinary seminar and attends the QPP seminar
  - Presentations made by experts in their field
  - With purpose to increase OCA staff knowledge on demographic, economic and investment perspectives for Canada
- Reviews researches, surveys and forecasts from external sources.
- Consults Statistics Canada, Finance Canada, HRSDC and the CPPIB.

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## Independent external peer review of reports and processes (ISAP 3.2) - Overview

### OCA commissions independent external peer review

- Federal, provincial, and territorial finance ministers endorse peer review of CPP reports
- External peer reviewers: 3 actuaries enrolled with the CIA and Fellows of the Society of Actuaries
- UK Government Actuary's Department (GAD)
  - Selects independent Canadian actuaries
  - Provides an opinion on the work done by peer reviewers
- OCA provides the documentation to reviewers
- Reviewers meet with the Chief Actuary and staff
- Reviewers meet with experts and submit their report

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## Independent peer review of reports and processes (ISAP 3.2) – Terms of reference / mandate

### Peer review panel provides opinions on:

- Professional experience of Chief Actuary and staff
- Compliance with professional standards and statutory requirements
- Accessibility to information required to perform valuation
- Reasonableness of actuarial methods and assumptions
- Communication of results through actuarial report.

### Also provides recommendations for future reports

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## Independent peer review of reports and processes (ISAP 3.2) - Benefits

### Enhances independence of the Chief Actuary

### Enhances stakeholders' and decision makers' confidence

- By increasing the credibility of the actuarial report; general public, auditor, and decision makers can be confident that the actuarial report fairly presents the results
- Parliamentarians, voting on proposed changes, are confident that the report is objective and exempt of bias.

### Motivates chief actuary and its team

- To continually improve the process
- To keep up to date with demographic and economic trends
- To always question themselves.

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## Independent peer review (ISAP 3.2) – Example of recommendations and OCA actions

### Second independent peer review: 31 Dec. 2000 report

- Recommendation:
  - continuing research on both technical and feasibility aspects of applying stochastic processes
- Action in 31 Dec. 2003 report (AR21):
  - Stochastic processes used to produce individual sensitivity tests for four assumptions
    - migration,
    - inflation,
    - real wage increases, and
    - real rates of return.

## Independent peer review (ISAP 3.2) – Example of recommendations and OCA actions

### Third independent peer review: 31 Dec. 2003 report

- Recommendation:
  - Applying more extensive and sophisticated stochastic analysis, and developing more plausible and consistent sensitivity tests for key assumptions
- Action in 31 Dec. 2006 report (AR23):
  - AR23 introduced a major methodological change related to the use of stochastic processes to assist in developing more objective criteria for the selection of the sensitivity tests for key assumptions
  - Introduced sensitivity tests based on a stochastic model for mortality and fertility.

## Independent peer review (ISAP 3.2) – Example of recommendations and OCA actions

### Fourth independent peer review: 31 Dec. 2006 report

- Recommendation:
  - We recommend that “point-in-time” funded status updates be minimized or eliminated from the Chief Actuary’s report.
- Action implemented in 31 Dec. 2009 report (AR25):
  - Some provinces prefer that financial information relating to the Plan’s assets and liabilities continue to be shown directly in the AR.
  - Publication of Technical Aspects of the Financing of the CPP study and RIJPM article, showing alternative means of evaluating the financial position of the Plan, with open group basis as the preferred method (Actuarial study #8).

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## Results of the most recent review – applicable to the 31 December 2009 report

### Main conclusions of the fifth external independent review

- In their opinions,
  - The professional experience of the Chief Actuary and the staff was adequate,
  - The work complies with relevant professional standards of practice and statutory requirements,
  - The Chief Actuary had access to the data required and performed relevant tests and analysis on the data as might be expected,
  - The actuarial methods are reasonable and the assumptions are, in aggregate, reasonable, but toward the low-cost side of the reasonable range,
  - The report fairly communicates the results

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## Results of the most recent review – applicable to the 31 December 2009 report

### Main conclusions of the fifth external independent review

- 15 recommendations including:
  - Putting in place formal procedure for effective two-way communications between the OCA and the CPPIB
    - The OCA already started discussions with the CPPIB to have regular meetings and information sharing.
  - Specific improvements for some sections of the report and the report as a whole
  - Preparing a research report on migration and its volatility

## Introduction of self-adjustment mechanisms – CPP insufficient rates provisions (*ISAP 4.1.3*)

### Insufficient Rates Provisions

If the legislated contribution rate is less than the steady-state contribution rate  
 AND  
 if the federal, provincial and territorial Finance Ministers cannot reach an agreement to increase or maintain the legislated rate,  
 THEN  
 insufficient rates provisions apply.



- Legislated contribution rate increased by  $\frac{1}{2}$  of excess over three years
  - Benefits frozen until next review (three years)
- At end of three years, next review performed to determine financial status of Plan.

## Self-adjustment mechanism: if there is no political agreement, CPP insufficient rates provisions apply

### When a statutory actuarial report shows that the contribution rate is insufficient, the insufficient rates provisions apply unless:

- The finance ministers recommend that the contribution rate be increased, taking effect within the specified time, or
- The finance ministers explicitly recommend that the contribution rate not be increased, and the decision is published.

### Why self-adjustment mechanisms?

- If there is no agreement or recommendation made by the finance ministers,
  - Insufficient rates provisions act as a safeguard for the long-term financial sustainability of the CPP; and
  - Insufficient rates provisions ensure something is done promptly to correct the situation.

## ISSA Good Governance Guidelines for Social Security Institutions – Actuarial Soundness

### Four Actuarial Soundness Guidelines

- Guideline 1: Actuarial measures of the social security programme (SSP)
- Guideline 2: Actuarial valuations of the SSP
  - The SSPs should have regular actuarial valuations to monitor the sustainability over time
- Guideline 3: Changes in contribution rates and benefits entitlements
- Guideline 4: Investment performance and benchmarks



## Conclusion – Guidelines exist to better serve the public interest

### Guidelines serves the public interest:

- Actuaries
- Ministers
- Stakeholders

### Adequate and timely decisions can be made when:

- The most credible and up to date information is available to decision makers
- The frequent political review are align with the actuarial reporting

## Questions or comments?

Expressions of individual views by members of The Actuarial Profession and its staff are encouraged.

The views expressed in this presentation are those of the presenter.

