



Office of the Superintendent of
Financial Institutions Canada

Bureau du surintendant des
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Discussion Paper on OSFI's Proposed Changes to the Regulatory Capital Framework for Federally Regulated Property and Casualty Insurers

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**OSFI
BSIF**

255 Albert Street
Ottawa, Canada
K1A 0H2

www.osfi-bsif.gc.ca

Canada 

TABLE OF CONTENTS

A. INTRODUCTION	3
B. BACKGROUND AND PURPOSE	5
C. THE REVISED MCT FRAMEWORK: SUPERVISORY TARGET AND MINIMUM CAPITAL REQUIREMENTS.....	5
D. PROPOSED CHANGES	6
Chapter 1. Overview and General Requirements	6
Chapter 2. Definition of Capital	6
Chapter 3. Asset Risks.....	9
Chapter 4. Policy Liability Risks.....	13
Chapter 5. Interest Rate Risk.....	17
Chapter 6. Foreign Exchange Risk	18
Chapter 7 Risks Associated with Structured Settlements, Letters of Credit, Derivatives and Other Exposures.....	18
Chapter 8. Foreign Companies Operating in Canada on a Branch Basis	19
Chapter 9. Operational Risk	19
Chapter 10. Risk Aggregation and Diversification	22
E. NEXT STEPS.....	24
Appendix A.....	25
Appendix B	27

A. INTRODUCTION

The Office of the Superintendent of Financial Institutions (OSFI) continues its review to improve the capital regime for federally regulated property and casualty insurance companies (P&C insurers) and is seeking the industry's input regarding the enclosed proposed changes. This discussion paper has been prepared in order to communicate to P&C insurers and other interested stakeholders the details of the proposed changes to the Minimum Capital Test (MCT) and the Branch Adequacy of Assets Test (BAAT). It should be noted that this paper does not address changes being contemplated with respect to the measurement of earthquake risk exposure and financial resource requirements associated with it. The latter are being handled through a separate process.

The proposed revisions to the capital/adequacy of assets tests, as outlined in this discussion paper, are based on the data received from P&C insurers through the data request of May 2012 and OSFI's internal analysis. The review of the insurance risk margins was done in collaboration with the Canadian Institute of Actuaries (CIA) and the Autorité des marchés financiers (AMF). The CIA's role was primarily to provide independent advice and actuarial expertise and data validation during the study. OSFI is now ready to discuss the proposed changes with the industry, whose feedback is essential to the review process.

Similar to the MCT Guideline, this discussion paper applies to both the MCT and BAAT, and uses generic expressions that are meant to apply to both Canadian P&C insurers and Canadian branches of foreign companies, e.g. capital required refers to margin of assets required for BAAT purposes.

In conjunction with the discussion paper, OSFI is requesting that P&C insurers participate in a quantitative impact study (QIS) that will enable insurers to estimate the impact from the proposed changes on their individual companies. OSFI will use the QIS results and take into consideration comments received on the discussion paper, as well as those received on the earthquake discussions, when it prepares the draft MCT Guideline. OSFI aims to issue the draft MCT Guideline for consultation and communicate aggregate industry QIS results before the end of 2013. The final revised version of the MCT Guideline is expected to be released in the summer of 2014, with a targeted implementation date of January 1, 2015.

The QIS and the review of the proposed changes outlined in the discussion paper must be done jointly in order to assess the revised capital framework in its entirety and understand the company-specific capital impact. P&C insurers should refer to the QIS and the supporting instructions for more details on the proposed changes, since the discussion paper was mostly kept at a high level. All P&C insurers are requested to participate in the QIS, while providing comments on the discussion paper is optional. Both the completed QIS files and comments on the discussion paper should be submitted to OSFI **by July 31, 2013**. Comments submitted during the consultation period may be posted on OSFI's website on an anonymous basis together with OSFI's responses to the issues raised. Please indicate in your response document if you prefer your comments not to be published.

The key proposed changes to the P&C insurance capital framework are outlined below.

Definition of Capital

1. Revise the composition of regulatory capital, qualifying criteria for eligible capital instruments, and applicable limits.
2. Clarify and amend regulatory adjustments to capital.

Insurance Risk

3. Revise the risk factors for insurance premiums and claims liabilities, with the recognition of an implicit diversification credit within the insurance risk factors.
4. Apply risk factors to premium liabilities rather than unearned premiums.
5. Eliminate the risk factors on deferred policy acquisition expenses.
6. Revise the calculation of the margin for reinsurance ceded to unregistered insurers.

Credit Risk

7. Review all credit risk factors for balance sheet assets and make adjustments where deemed necessary.
8. Introduce effective maturity as an alternative approach in calculating capital requirements for instruments that are subject to a determined cash flow schedule.

Risks Associated with Off-Balance Sheet Exposures

9. Revise the risk factors for structured settlements, derivatives and other exposures with more granular risk factors based on a credit rating and term to maturity of an exposure.
10. Replace the 0.5% risk factor for letters of credit with more granular risk-based factors.

Market Risk

11. Calibrate the risk factors for investments in common equity and real estate.
12. Adjust the shock factor for the interest rate risk margin.
13. Implement a more robust methodology for calculating foreign exchange risk requirements that would apply to both MCT and BAAT.

Operational Risk

14. Introduce an explicit risk charge for operational risk.

Diversification Credit

15. Recognize an aggregation benefit arising from the diversification between insurance risk and the sum of credit risk and market risk.

More details on the proposed changes are provided below.

B. BACKGROUND AND PURPOSE

The MCT for Canadian P&C insurance companies and the BAAT for Canadian branches of foreign P&C insurance companies (commonly the MCT) were introduced effective January 1, 2003 and replaced their less sophisticated predecessors, the Minimum Asset Test and the Deposit Adequacy Test. Since most of the risk factors that were originally introduced in the tests have not been updated since 2003, OSFI initiated a thorough review of all risks that feed into the MCT. OSFI has also identified some additional risks that it believes should be explicitly measured in the MCT.

The purpose of the proposed changes to the regulatory capital framework is to ensure that federally regulated P&C insurers continue to have a robust risk-based capital test. The revised test will assess all risk measures and will better align, where appropriate, with capital frameworks across the financial sectors.

Under the revised capital framework, the supervisory target level of capital required for Canadian P&C insurance companies and margin required for branches of foreign P&C insurers (capital required) will be derived explicitly, based on a pre-determined confidence level. This approach is more consistent with the risk-based regulation concept and is in line with international regulatory developments.

OSFI introduced the first round of changes to the MCT effective January 1, 2012. Changes proposed in this discussion paper are a continuation of the 2012 changes.

OSFI issued a data request in May 2012 to test the expected capital impact of certain changes being considered, for which data were not already available. OSFI had a high response rate to its data call and was able to test various options in order to formulate some of the recommendations contained in this discussion paper.

OSFI has commenced an internal process aimed at developing a new capital framework for mortgage insurers. Notwithstanding this, until such time as the new mortgage insurance capital requirements are developed and implemented, the MCT will continue to apply to mortgage insurers. Mortgage insurers are not requested to participate in the QIS or provide comments on the discussion paper. OSFI is also in the process of reviewing the life insurance capital framework, and the Minimum Continuing Capital and Surplus Requirements (MCCSR) risk factors for accident and sickness line of business are still under review. Therefore, this discussion paper does not address accident and sickness risk factors at this stage but should the risk factors change in the MCCSR in the future, OSFI will amend the MCT Guideline accordingly.

C. THE REVISED MCT FRAMEWORK: SUPERVISORY TARGET AND MINIMUM CAPITAL REQUIREMENTS

The solvency framework for P&C insurers consists of two major work streams: standard approach and internal models approach. The main subject of this discussion paper relates to the MCT standard approach. All P&C insurers must use the MCT standard approach to arrive at a

minimum level of capital required. Those P&C insurers that receive an approval from OSFI to use internal models will be able to derive their supervisory target level of capital required based on their models, in addition to using the MCT standard approach to compute the minimum level of capital required.

As part of the proposed changes to the standardized regulatory capital requirements, OSFI is developing the MCT risk factors at a pre-determined target confidence level. OSFI has elected 99% of the expected shortfall (conditional tail expectation or CTE 99%) over a one-year time horizon as a target confidence level. As alternatives, a value at risk (VaR) at 99.5% confidence level or expert judgement was used when it was not practical to use the CTE approach.

The revised risk factors will yield capital requirements at the target level, as opposed to the current factors that are used to arrive at the minimum level of capital required. Therefore, under the revised framework, the minimum capital required will be derived using the capital required calculated at the target level. The minimum capital required will be equivalent to the capital required calculated at target, divided by 1.5. Under this approach, capital requirements will be expressed as follows:

- *Minimum capital required = Capital required at target / 1.5*
- *MCT ratio = Capital available / Minimum capital required*
- *Supervisory minimum capital ratio = 100%*
- *Supervisory target capital ratio = 150%*

D. PROPOSED CHANGES

For ease of reference, the proposed changes outlined below are presented in the same order as the chapters of the 2012 MCT Guideline. When completing the QIS, companies should refer to the information presented below as well as the supporting QIS instructions.

Chapter 1. Overview and General Requirements

This section provides an overview of OSFI's risk-based capital adequacy framework and its use in assessing the financial condition of P&C insurers. This section will be revised to explain the new capital framework whereby the MCT will explicitly measure all major risks and produce the capital requirements at the supervisory target level going forward.

Chapter 2. Definition of Capital

In July of 2012, OSFI issued a position paper for consultation with the industry, outlining the proposed changes to the definition of capital in the MCT. The position paper outlined OSFI's intentions with respect to the qualifying criteria for allowable capital instruments, capital available components, capital composition limits, and regulatory adjustments. Following the consultation period, OSFI received a number of submissions from industry stakeholders. Appendix A presents a summary of comments from the industry along with OSFI's responses.

The proposed changes to the definition of capital are outlined below, taking into consideration the industry's comments that were raised during the consultation period.

1) Qualifying criteria

It is OSFI's objective to ensure that the capital available of P&C insurers remains of the highest quality and is sufficient to absorb losses in periods of stress. As new capital instruments are becoming increasingly sophisticated, OSFI recognizes the need to adequately articulate in the MCT Guideline the qualifying criteria used to determine whether certain instruments are eligible for inclusion in capital available.

OSFI proposes to add to the MCT Guideline an explicit list of qualifying criteria for common shares and allowable capital instruments other than common shares. Appendix B provides the list of qualifying criteria under schedule A for common shares, and schedules B and C for other capital instruments allowed in capital available. The proposed qualifying criteria are intended to add clarity to the guideline.

2) Capital components

Consistent with the position paper, OSFI proposes to include accumulated other comprehensive income (AOCI) as a component of capital available, subject to adjustments to remove the impact of certain AOCI items that are currently excluded from capital. This modification would change the current presentation of capital available, where the calculation of capital available in the MCT would begin with the IFRS definition of equity, subject to regulatory adjustments.

3) Capital composition limits

OSFI proposes to clarify that the 40% capital composition limit, currently applied to preferred shares classified as equity under the Canadian generally accepted accounting principles (CGAAP), will apply to the aggregate of all capital instruments that meet the qualifying criteria under schedules B and C, and will be measured against total capital available rather than total equity. OSFI believes that using capital available as a reference point is a better option as it is a more accurate measure of regulatory capital.

OSFI also proposes to modify the MCT 2% limit of total assets, currently applied to preferred shares classified as debt under CGAAP and subordinated indebtedness, such that it would apply to capital instruments qualifying under schedule C criteria and would be measured against capital available rather than total assets. OSFI's analysis suggests that an equivalent industry-wide sub-limit equates to approximately 7% of total capital available.

OSFI will clarify that, in cases where capital instruments qualifying under schedules B and C exceed the proposed limits, the portion in excess of the limits would not be considered in the calculation of capital available, except in certain exceptional circumstances.

The industry raised a concern regarding the proposed approach to calculating the capital composition limits, arguing that the temporary volatility in capital available brought by AOCI could potentially cause a temporary breach of the capital limits and would necessitate an

unwarranted deduction of an excess portion from capital available. Consequently, OSFI proposes that the capital composition limits should be measured against capital available net of AOCI. This adjustment would only apply for the purposes of calculating capital composition limits. OSFI's analysis indicates that this modified approach to calculating capital limits would have no immediate capital impact on the industry but would remove the volatility in the limits in response to the industry's concern.

4) *Regulatory adjustments to capital*

Some of the proposed regulatory adjustments to capital available are meant to clarify the existing restrictions used in practice by OSFI, while others present changes to the current regulatory adjustments in the MCT Guideline. The proposed enclosed changes are consistent with changes being proposed in the other financial sectors.

- a. *Computer software.* OSFI proposes that computer software intangibles be fully deducted from capital available. This represents a change to the current treatment under the MCT, where computer software intangibles attract a 35% risk charge. This change is required due to the highly uncertain net realizable value of computer software intangibles in stress scenarios.
- b. *Cumulative gains and losses due to changes in own credit risk on fair valued liabilities.* OSFI proposes to broaden the current provision, where “accumulated net after-tax fair value gains (losses) arising from changes in a P&C insurer’s own credit risk for the insurer’s financial liabilities that are classified as held for trading are deducted from capital,” to apply to all unrealized net after-tax fair value gains (losses) and not just those classified as held for trading.
- c. *Investments in own shares (treasury stock).* OSFI proposes to clarify in the MCT Guideline that an institution’s investments in its own capital instruments, whether held directly or indirectly, are deducted from capital available to prevent insurers from artificially inflating their capital position. This change is consistent with and extends the current prohibitions on insurers owning their own shares as stipulated under the *Insurance Companies Act*.
- d. *Reciprocal cross holdings in the capital of financial entities.* OSFI proposes to include in the MCT Guideline a requirement that reciprocal cross holdings in the capital of financial entities must be deducted from capital available, in order to prevent P&C insurers from artificially inflating their capital position. This provision will clarify OSFI’s effective interpretation of the treatment of reciprocal cross holdings (also known as back-to-back placements) in the MCT Guideline.
- e. *Deferred tax assets.* The current capital treatment of deferred tax assets (DTAs) depends on the nature of those assets. A 0% risk factor applies to “the deferred tax assets arising from the discounting of claims reserves for tax purposes or from unrealized capital gains that are recoverable from income taxes paid in the three immediately preceding fiscal years,” while a 100% deduction from capital available applies in all other cases. OSFI proposes to only include in capital available the DTAs based on the recoverability criteria and not based on the nature of those DTAs. Therefore, OSFI proposes to recognize in capital available only those DTAs that

arise from temporary differences, irrespective of their nature and that are recoverable from the income taxes paid in the three immediately preceding fiscal years (subject to a 10% risk charge), and to deduct from capital available all other DTAs.

The DTAs to be deducted from capital available or those to receive a risk charge may be netted with associated deferred tax liabilities (DTLs) only if the DTAs and DTLs relate to taxes levied by the same taxation authority and offsetting is permitted by the relevant taxation authority. The DTLs permitted to be netted against DTAs must exclude amounts that have been netted against the deduction of goodwill, intangibles, defined benefit pension assets and the de-recognition of the cash flow hedge reserve, and must be allocated on a pro-rata basis between DTAs that are to be deducted in full and DTAs that are subject to a 10% risk charge.

Chapter 3. Asset Risks

A. Credit Risk

Credit risk arises from a counterparty's potential inability or unwillingness to fully meet its on- and/or off-balance sheet contractual obligations. Exposure to this risk occurs any time funds are extended, committed, or invested through actual or implied contractual agreements.

Credit risk factors discussed in this section are divided into three categories: the first category captures those credit risk factors that were introduced in the MCT in 2012, the second category includes the existing standard credit risk factors that OSFI proposes to calibrate to the target level using the 1.25 multiplier, and the third category deals with credit risk factors that required a more in-depth analysis and comparison across the financial sectors resulting in different proposed changes.

In addition to the revised credit risk factors, OSFI is considering allowing P&C insurers to use effective maturity in order to determine risk factors for calculating capital required for instruments that are subject to a determined cash flow schedule.

1) Credit risk factors introduced in 2012

Effective January 1, 2012, OSFI introduced new risk factors for investments in long-term obligations including term deposits, bonds and debentures, short-term obligations including commercial paper, and preferred shares. OSFI also introduced a risk charge for non-owned deposits held as collateral from unregistered reinsurers (off-balance sheet exposures). Risk factors applicable to non-owned deposits are the same as those applied to similar invested assets reported on a P&C insurer's balance sheet. These factors will remain unchanged under the revised MCT even though the new framework is at target.

2) *Credit risk factors calibrated to the target level*

There are certain risk factors for which no adjustments were deemed necessary except for the gross-up to the target level. In order to make such an adjustment, OSFI utilized the current relationship between the minimum capital ratio (100% MCT) and the supervisory target capital ratio (150% MCT). Since capital requirements for operational risk are currently implicitly reflected in the 150% supervisory target capital requirements, the relationship between the 120% and 150% (i.e. a 1.25 multiplier) was used to gross up the existing risk factors to target. The following table presents the existing minimum and proposed target risk factors:

Current Minimum Credit Risk Factor	Proposed Target Credit Risk Factor
0%	0%
0.5%	0.7%
2%	2.5%
4%	5%
8%	10%
10%	12%
15%	20%
35%	45%

3) *Other credit risk factors*

Cash and cash equivalents not held on insurer's premises

Currently all cash and cash equivalents attract a 0% risk factor under the MCT. OSFI believes that a 0% risk factor is still appropriate for cash held on company's premises and intends to maintain the current capital treatment. However, OSFI believes that demand deposits, certificates of deposits, drafts, checks, acceptances and similar obligations with an original maturity of less than one year are slightly riskier and this should be reflected in a higher risk factor for those assets. OSFI therefore proposes that the instruments described above that are drawn on regulated deposit-taking institutions subject to the solvency requirements of the Basel Framework, should attract a risk factor of 0.25%, consistent with the factor applied to highly rated short-term securities.

Sovereign bonds

The MCT applies a 0% risk factor to investments in obligations rated AAA- or higher of central governments and central banks, or obligations of organizations with the guarantee of the AAA-rated central governments. Investments in obligations of central governments that are rated AA+ and lower attract risk factors applicable to investments in other long-term obligations, based on a credit rating and term to maturity. For consistency across the financial sectors, OSFI proposes a slight change to the current requirement, whereby a 0% risk factor will apply to investments in sovereign bonds rated AA- and higher while the risk factors based on a credit rating and term to maturity applicable to investments in long-term obligations will continue to apply to investments in sovereigns rated below AA-.

Obligations of municipalities and public school boards

Under the current MCT, investments in obligations of federal, provincial, territorial and municipal governments and school corporations in Canada attract a 0% risk factor. While OSFI agrees that this treatment is warranted for federal, provincial and territorial government obligations, OSFI believes that municipal governments and school corporations do not belong in this category. It is therefore proposed that investments in municipal governments and school corporations be subject to risk factors based on credit ratings and term to maturity, similar to investments in other long-term obligations under the MCT, unless they are guaranteed by federal, provincial or territorial government.

Unrated long-term and short-term obligations

The MCT does not specify what risk factors should be applied to investments in unrated long-term obligations such as term deposits, bonds and debentures. OSFI proposes the following risk factors for unrated long-term securities:

- 6% risk factor for long-term obligations with remaining term to maturity of one year or less
- 8% risk factor for long-term obligations with remaining term to maturity greater than one year and up to and including five years
- 10% risk factor for long-term obligations with remaining term to maturity of greater than five years

There is also no explicit risk factor for investments in unrated short-term obligations, including commercial paper in the current MCT. OSFI proposes a 4% risk factor for investments in unrated short-term obligations with the original maturity of less than one year.

Loans

Currently, loans rated A- and higher attract a 4% risk factor while all other loans are subject to a 10% risk factor. OSFI proposes to change this approach so that all loans, other than mortgage loans, are treated similarly to investments in other long-term obligations under the MCT. Under the proposed approach, loans would be subject to more granular risk factors based on ratings and term to maturity, similar to investments in term deposits, bonds and other long-term obligations. Unrated loans will attract similar risk factors as those proposed for investments in unrated long-term obligations.

Mortgage loans

OSFI believes that the current 4% risk factor for residential mortgages and 15% for mortgages secured by undeveloped land are adequate and does not propose changing them in the revised capital framework.

Receivables for assumed business from unregistered reinsurers

OSFI proposes to clarify that the risk factors for receivables from agents, brokers and policyholders, depending on the number of days outstanding, i.e. a 5% risk factor if outstanding less than 60 days and a 10% risk factor if outstanding longer than 60 days also apply to

receivables for assumed business from unregistered reinsurers (from both associated and non-associated unregistered reinsurers).

Deferred tax assets

Refer to chapter 2 *Definition of Capital*, regulatory adjustments section of this paper for the proposed revised capital treatment of deferred tax assets.

Other assets

Other assets (excluding goodwill and other intangibles) are allowed in capital available, up to 1% of total assets, and attract a 35% risk charge. Other assets exceeding the allowable limit are currently deducted from capital available. OSFI proposes to change the capital treatment of other assets by reducing the risk factor to 10% and eliminating the existing 1% limit.

Assets held for sale

Assets held for sale is a relatively new asset category that represents assets or a disposal group, for which the carrying amount will be recovered principally through a sale transaction rather than current use. The current MCT treatment of assets held for sale is to apply a 35% risk charge. OSFI proposes changing the single factor-based approach to a more risk-based look-through approach, where capital required for an asset held for sale/disposal group would be calculated as if it were still part of the reporting entity, i.e. by applying the same risk factors to the disposal group's assets and liabilities, net of the IFRS value adjustments.

4) *Effective maturity*

Currently, P&C insurers must use a nominal maturity for calculating the risk charge on investments in debt instruments. In case of an amortizing security (i.e. a type of debt security in which a portion of the underlying principal amount is paid in addition to periodic interest payments to the security's holder), the weighted maturity can be used. OSFI proposes that P&C insurers be allowed to use an effective maturity as an option for determining risk factors for investments in long-term obligations subject to a determined cash flow schedule.

The following formula can be used to calculate the effective maturity:

$$\text{Effective Maturity } (M) = \frac{\sum_t t \times CF_t}{\sum_t CF_t},$$

where CF_t denotes the cash flows (principal, interest payments and fees) contractually payable by the borrower in period t .

In cases where an insurer elects not to calculate an effective maturity or if it is not feasible to do so using the above formula, the insurer will be required to use a more conservative measure such as the maximum remaining time (in years) that the borrower is permitted to fully discharge its contractual obligation (principal, interest, and fees) under the terms of the loan agreement. Normally, this would correspond to the nominal maturity or term to maturity of the instrument.

B. Market Risk

Market risk arises from potential changes in market rates or prices in various markets such as for interest rates, foreign exchange, equities, and real estate. Exposure to this risk results from trading, investment, and other business activities that create on- and off-balance sheet positions.

Common equity

OSFI proposes amending the risk factor for investments in common shares from 15% at the minimum level to 30% at the target level of confidence. The new risk factor at target would better reflect the increased volatility experienced in global equity markets, would harmonize the risk factor that will be applied to equity investments for the life insurance sector, and is consistent with international trends.

Joint ventures with less than or equal to 10% ownership interest

Investments in joint ventures with less than or equal to 10% ownership are currently subject to the risk factor applicable to common shares. Consistent with the proposed increase in the risk factor for common shares from the 15% minimum factor to 30% at target, OSFI proposes increasing the risk factor on investments in joint ventures with less than or equal to 10% ownership to 30%.

Interest rate risk and foreign exchange risk

Although interest rate risk and foreign exchange risk are part of the market risk category, they are addressed separately under chapters 5 and 6 of this discussion paper, to follow the order of the current MCT Guideline.

Chapter 4. Policy Liability Risks

Insurance risk arises from the potential for claims or payouts to policyholders to be higher than the amounts originally estimated. Exposure to this risk results from adverse events or a mis-estimation of actuarial reserves.

The insurance risk is a significant risk and represents approximately 60% of Canadian P&C insurers' total capital requirements. The current MCT insurance risk factors were developed based on a study over 10 years ago and were due for a thorough review. Furthermore, the factors are currently at the minimum level and need to be adjusted to the target level under the new capital framework.

The review of the insurance risk margins was done in collaboration with the Canadian Institute of Actuaries (CIA) and the Autorité des marchés financiers (AMF). The CIA's role was primarily to provide independent advice and actuarial expertise and data validation during the study.

A factor-based approach is currently used in the MCT and is the approach recommended for determining insurance risk requirements under the new capital framework. A factor-based approach is simple in its application, best suited to the standardized approach under the new

capital framework and P&C insurers are already familiar with it. The factors will continue to be applied to the best estimate liability by line of business and be the same for all companies; i.e., will not vary based on the volume of business of the company.

To develop the new factors, OSFI undertook a variability analysis based on incurred and paid data to assess the insurance premiums and claims risks. For unpaid claims, OSFI performed a variability analysis between the estimated and the actual amount of losses using two methods: lognormal and bootstrap. For premium liabilities, OSFI's variability analysis was built based on pure loss ratio data, assessing variability in ultimate loss ratios by line of business for each accident year. A correlation study between lines of business was also performed to determine the level of diversification credit. Based on the correlation study, there is a high level of correlation in premiums liability but close to 0% in claims liability. The proposed methodology to determine the insurance risk factors can be summarized as follows:

- Derived new factors for adverse development of insurance risk based on industry data, at a confidence level of VaR 99.5%
- Introduced increased granularity by line of business for both premiums risk and claims risk
- Retained an approach where diversification credit within insurance risk continues to be accounted for implicitly in the risk factors
- Excluded an average of the provisions for adverse deviation (PfADs) from the factors derived from the variability study as the variability study is based on the best estimate liability (i.e. excluding PfADs)

The following sources of data have been considered by OSFI in order to perform the data analysis:

1. The P&C statutory financial return forms.
2. The IBC Green Book automobile data.
3. The Unpaid Claims and Loss Ratio Analysis Exhibit contained in the Appointed Actuary's reports (AAR) filed with OSFI.
4. The data collected in the data call conducted in May 2012, more specifically on premium liabilities.

1) Unpaid claims risk margins

OSFI is proposing an approach where some diversification credit within insurance risk is allowed under the assumption that insurers have a well-diversified portfolio of risks for a given portfolio of businesses. The proposed risk factors for each line of business contain an implicit diversification credit, which is consistent with the current approach of the MCT where the diversification credit is embedded in the risk factors. Consequently, P&C insurers are already familiar with the methodology. Based on our study, the derived factors were reduced by approximately 45% for claims liabilities to account for diversification.

The main reason for not allowing an explicit diversification credit across lines of business is that the data required to assess the correlation between lines of business under a stress scenario are scarce and not readily available.

Based on its analysis, OSFI is proposing to replace the 5%, 10% and 15% risk buckets applied to net unpaid claims at the minimum level to a four-risk buckets scheme of 10%, 15%, 20% and 25% at the target level. In summary, the largest classes of business for P&C insurers were adjusted as follows due to the results of OSFI's variability analysis:

- the data for the property class of insurance (personal and commercial lines) and liability demonstrated more volatility than expected and therefore were judged as being riskier than estimated in 2003 and that the risk factors needed to be increased;
- OSFI's variability analysis demonstrated that the expected losses for automobile were not that far from the actual losses incurred and actually called for a downward adjustment of the risk factors (except for "automobile - other").

The following table summarizes the current MCT risk factors and the proposed risk factors for the new capital framework:

Category	Current MCT Factor at minimum	125% Current MCT Factor at target	Proposed MCT Factor at target
Personal Property	5.0%	6.25%	15.0%
Commercial Property	5.0%	6.25%	15.0%
Aviation	15.0%	18.75%	20.0%
Auto Liability - Bodily Injury	10.0%	12.50%	10.0%
Auto - Personal Accident	10.0%	12.50%	10.0%
Auto - Other	5.0%	6.25%	15.0%
Boiler & Machinery	15.0%	18.75%	15.0%
Credit	15.0%	18.75%	20.0%
Credit Protection	15.0%	18.75%	20.0%
Fidelity	15.0%	18.75%	20.0%
Legal Expense	15.0%	18.75%	25.0%
Liability	15.0%	18.75%	25.0%
Other Approved Products	15.0%	18.75%	20.0%
Surety	15.0%	18.75%	20.0%
Title	15.0%	18.75%	15.0%
Marine	15.0%	18.75%	20.0%

OSFI has not split the warranty portion of property (home warranty and product warranty) and of boiler & machinery (equipment warranty) in the above table as OSFI does not have any historical information to establish whether the risk factors should be different from the previously associated insurance classes. At this stage, OSFI proposes to use the same risk factors and this is reflected in the QIS.

2) *Premium liability risk margins*

The analysis was performed to determine the VaR 99.5 variability in ultimate loss ratios by line of business for each accident year, consistent with the unpaid claims analysis.

The proposed methodology is to apply the proposed risk factors to premium liabilities rather than unearned premiums. OSFI believes that this is a better proxy to measure the premiums risk because the balance sheet liability account entitled “unearned premiums” is created to recognise the revenues over the term of the policy and is not intended to be an estimate of future cash flows or risk exposure.

Because OSFI’s variability analysis was built based on pure loss ratio data (i.e. excluding general expenses), the resulting factors were adjusted to reflect the fact that they will be applied to premium liabilities (which include general expenses). An allocation of 10% of premium liabilities for general expenses was used in OSFI’s analysis as an industry average.

The proposed factors were reduced by 11% for all lines of business to account for risk diversification. As mentioned earlier, OSFI’s correlation study demonstrated that premium liabilities by lines of business are more correlated compared to claims liabilities; therefore a lower diversification credit is proposed to be attributed.

The proposed approach is to apply risk factors to premium liabilities - excluding PfADs - by line of business, instead of applying a single factor of 8% on unearned premiums irrespective of line of business and a 35% risk factor to DPAE-commissions. Under the proposed approach, OSFI will no longer require “other DPAE” to be deducted from capital available. Consequently, there will be an increase in capital available due to this change. The proposed risk factors are:

Category	Proposed Factors at target
Personal Property	20%
Commercial Property	20%
Aviation	25%
Auto Liability – BI	15%
Auto – Pers. Acc.	15%
Auto – Other	20%
Boiler & Machinery	20%
Credit	25%
Credit Protection	25%
Fidelity	25%
Legal Expense	30%
Liability	30%
Other Approved Products	25%
Surety	25%
Title	20%
Marine	25%

Due to the fact that the proposed risk factors will now be applied to premium liabilities instead of unearned premiums, the existing floor of 50% of net written premiums has been adjusted. A floor of 40% is proposed under the new capital framework. The floor continues to be necessary to ensure that premium liability risk margins remain at an appropriate level when the bulk of insurance or reinsurance policies have a similar maturity date, leading to a major variation in the unearned exposure at various dates (e.g. industry's practice of placing reinsurance programs on a calendar year basis).

3) Margin on unearned premiums ceded to, and outstanding losses recoverable from, unregistered insurers

The current MCT applies a 10% margin on unearned premiums ceded to, and outstanding losses recoverable from, unregistered insurers. The 10% margin was derived as an average of the current MCT factors for unearned premiums (8%) and unpaid claims (5%, 10% and 15%) applied to policy liabilities. The reason for using the factor equivalent to the average of insurance policy liabilities factors was to bring capital requirements for Canadian-registered and unregistered reinsurers to a level playing field.

OSFI proposes to use a similar approach to derive a new margin factor associated with unregistered reinsurance recoverables, i.e. an average of the revised insurance risk factors derived for policy liabilities. The average of the revised risk factors for premium liabilities and unpaid claims is 20%. Because the revised 20% risk margin is at the target level, OSFI proposes to eliminate the adjustment of 1.5 that was bringing the margin required to the target level.

Chapter 5. Interest Rate Risk

Interest rate risk margin was introduced in the MCT effective January 1, 2012, to account for the risk of economic loss resulting from market changes in interest rates. An interest rate shock factor of 0.50% was used to compute the interest rate risk margin in the 2012 MCT (i.e. a 50 bps change in interest rates) and a shock factor of 0.75% was used in the 2013 MCT. Such a gradual increase in shock factors was used in order to phase in the impact of introducing the interest rate risk capital requirement. However, the 0.75% shock factor is still under the target level of confidence considered under the revised regulatory capital framework.

OSFI's analysis of interest rate shock factors at the target level was done using a methodology developed internally, as described in the fourth quantitative impact study (QIS 4) for the life insurance industry. In order to determine a single basis point shock factor at the target level for the MCT, OSFI looked at the shock factors derived for an upward and a downward movement in rates for two, three and four year durations, consistent with a P&C insurer's typical duration of assets and liabilities. Based on its analysis, applicable shock factors fluctuated between 0.86% and 1.88%. OSFI therefore proposes a shock factor of 1.25% for the revised capital framework. OSFI will continue monitoring the economic and interest rate environment in Canada and will consider adjusting the interest rate shock factor in future revisions of the MCT, if deemed appropriate.

Chapter 6. Foreign Exchange Risk

The foreign exchange risk requirement is intended to cover the risk of loss resulting from fluctuations in currency exchange rates. OSFI has announced that, under the revised capital framework, it intended to introduce a foreign exchange risk margin to Canadian P&C companies' capital requirements and to modify the current foreign exchange risk margin for branches of foreign insurance companies. Under the existing BAAT, branches are required to hold a margin of 8% only in cases where foreign currency assets are in excess of foreign currency liabilities. This current foreign currency risk charge used in the BAAT fails to measure the risk related to the mismatch when foreign currency denominated liabilities exceed foreign currency denominated assets.

As part of its analysis of the foreign exchange risk, OSFI reviewed P&C insurers' response to the data call with respect to the foreign exchange risk margin, which was based on the foreign exchange risk chapter introduced in the draft 2012 MCT issued in May of 2011. OSFI proposes to introduce a foreign exchange risk margin calculated for the portfolio of positions in different currencies, by applying a 10% risk factor (currently 8% grossed up to the target level) to the greater of the aggregate net long positions and the aggregate net short positions in each currency, adjusted by effective allowable foreign exchange rate hedges, if any are used. The allowable foreign exchange rate hedges will be limited to plain vanilla type hedges.

OSFI proposes a carve-out of up to 25% of liabilities in a given foreign currency. The carve-out can be used by P&C insurers holding a net open long position in the same currency to reduce the amount of the net exposure. The maximum carve-out of 25% was derived based on the industry average of assets over liabilities at which P&C insurers currently operate, assuming that maintaining a portion of surplus assets in the same currency as liabilities is a reasonable approach.

Chapter 7. Risks Associated with Structured Settlements, Letters of Credit, Derivatives and Other Exposures

Letters of credit

Letters of credit are off-balance sheet exposures used as collateral in unregistered reinsurance arrangements and for self-insured retention. In order to receive a capital credit, a letter of credit must be issued or confirmed by a Canadian financial institution, and must be approved by OSFI. Letters of credit are considered direct credit substitutes and are subject to a 100% credit conversion factor under the MCT. The MCT currently applies a 0.5% risk factor on all letters of credit used for unregistered reinsurance and self-insured retention. OSFI proposes to change the current 0.5% risk charge to more granular risk-based factors based on the credit rating of the issuing or confirming bank, similar to the factors applied to investments in long-term obligations on the balance sheet.

Structured settlements

Type 1 structured settlements are also reported off-balance sheet and attract a 0.5% risk factor if the counterparty from which an instrument was purchased has the credit rating of A- and higher,

and 4% if the credit rating is BBB+ and lower. Structured settlements (type 1) are subject to a 50% credit conversion factor. Consistent with a risk-based approach, OSFI proposes changing the current risk factors to more granular factors based on credit ratings and term to maturity, similar to those applied to invested assets on the balance sheet.

Derivatives

Derivative instruments currently attract a 0.5% risk factor if the counterparty is rated A- and higher, and 4% if rated BBB+ and lower. For consistency with other on and off-balance sheet exposures, OSFI proposes to change the current risk factors to more granular factors based on a credit rating and term to maturity, similar to those applied to insurers' long-term investments on the balance sheet.

Other exposures

Consistent with the approach taken for off-balance sheet exposures such as letters of credit, structured settlements and derivatives, OSFI proposes a similar capital treatment for other off-balance sheet exposures, i.e. apply more granular risk-based factors based on credit ratings and term to maturity, similar to those applied to invested assets on the balance sheet.

Chapter 8. Foreign Companies Operating in Canada on a Branch Basis

Chapter 8 of the MCT Guideline outlines OSFI's requirements with respect to the branch adequacy of assets ratio for foreign P&C insurers. Section 8.2 of the guideline defines which assets can be considered as net assets available for the purposes of calculating the BAAT ratio for branches. Net assets available for branches is a similar concept to capital available for Canadian P&C companies. Although this discussion paper proposes a number of changes to chapter 2 *Capital Available* of the MCT Guideline, most of those changes will not apply to branches due to the vested assets regime.

Under the proposed approach to measuring premium liability risk margins, OSFI would no longer require "other DPAAE" to be deducted from capital available. Consequently, this change would positively affect branches' net assets available under the revised framework as all DPAAE would be fully recognized in net assets available (reference chapter 4).

Chapter 9. Operational Risk

The current requirement for operational risk is embedded in the supervisory target capital ratio. As part of its proposed changes to the regulatory capital framework, OSFI has developed an explicit formula to calculate operational risk charge.

Operational risk events (e.g. a human or a systems error) can cause severe losses and may lead to an insurer's insolvency or near insolvency. Traditional risk mitigation approaches (e.g. internal controls, auditing) are not expressly designed for low frequency, high severity events. They are designed to capture transactional errors, whereas operational risk in insurance entities originates mainly in other areas. In addition, transactional errors tend to be of a manageable loss size, whereas an explicit risk margin is required for low frequency and high severity tail events.

The proposed approach should be regarded as a first step in setting an explicit risk charge for operational risk. The initial methodology will focus on a few risk proxies only. As more information and loss experience data is gathered, OSFI will consider including more risk proxies and enhance the measure of the risk exposure if warranted.

The proposed formula for calculating the operational risk margin aims to provide a simple and reasonable measure of the risk exposure using readily available data. Other more complex risk measures were explored but were not retained as they were not providing more precision in measuring operational risk requirements.

1) Proposed definition of operational risk

The following is the definition of operational risk that OSFI proposes to utilize in the revised MCT Guideline:

Operational risk is the risk of loss resulting from inadequate or failed internal processes, people and systems or from external events. The definition includes legal risk¹ but excludes strategic and reputation risks.

2) Proposed formula for operational risk charge

In order to keep the new approach simple, OSFI has developed a methodology for calculating the operational risk margin that combines a new premium-based component and a portion of OSFI's existing operational risk charge based on capital required. This approach will serve as a transition from OSFI's current requirement (implied 20% of minimum capital required) to a method that links to the volume of business and other risk drivers.

The following three risk drivers would be used to calculate the proposed operational risk margin, subject to a cap:

- capital/margin required;
- premium level: direct, assumed and ceded; and
- increase in gross premiums beyond a given threshold;

$$\text{Operational risk margin} = \text{MIN} \{40\% \text{ } CR_0, (10\% \text{ } CR_0 + 3\% \text{ } P_w + 2\% \text{ } P_a + 3\% \text{ } P_c + 3\% \text{ } P_A)\},$$

where:

CR_0 is capital required before operational risk and diversification credit

P_w is direct premiums written in the past 12 months

P_a is premiums assumed in the past 12 months

P_c is premiums ceded in the past 12 months

P_A is growth in premiums in the past 12 months

¹ Legal risk includes, but is not limited to, exposure to fines, penalties, or punitive damages resulting from supervisory actions, as well as private settlements.

- ***10% risk charge on capital/margin required***

OSFI proposes to retain a portion of the existing operational risk charge that is based on total capital/margin required, in order to avoid putting too much weight on premiums-based methodology, and to ensure a smooth transition from the current approach. The 10% risk factor would be applied to capital/margin required at target, before operational risk margin and diversification credit.

- ***Risk charge on premiums***

- *3% on direct written premiums*

This component captures an insurer's operational risk exposure on new business and renewals.

- *2% on reinsurance assumed*

- *3% on reinsurance ceded*

Reinsurance, both assumed and ceded, adds an additional layer of business complexity.

The proposed risk factor for assumed business is lower than for direct written premiums since the assuming insurer does not interact with multiple policyholders directly but instead assumes a pool of homogeneous policies from a ceding insurer. As such, the operational risk associated with premiums assumed is considered to be lower than the risk associated with direct premiums written since it involves fewer individual policies, fewer claims processing activities, and lower sales and marketing risk. The lower capital charge is based on the assumption that the ceding insurer has done its due diligence in underwriting direct policies resulting in less operational risk exposure to the assuming insurer.

The risk factor for premiums ceded is necessary to capture the operational risk remaining with the ceding insurer. Although the insurer does cede a portion of its insurance risk through reinsurance, the operational risk remains with the insurer. The total capital requirements on insurance liabilities under the MCT are calculated on the net amount of risk (net of reinsurance) and, therefore, the operational risk charge calculated as 10% of capital required is also calculated on the net basis. OSFI therefore proposes a 3% risk factor on premiums ceded, to capture the operational risk that still remains with the ceding insurer. The proposed risk charge also covers an additional operational risk exposure (legal, fraud, etc.) associated with ceding a portion of premiums. This 3% risk factor is not intended to capture the credit risk associated with ceding policies to a reinsurer; credit risk charge is addressed separately in the MCT.

OSFI proposes a modified risk charge on premiums for intra-group reinsurance pooling arrangements in order to avoid a double risk charge on premiums. However, consideration must be given to the additional operational risk exposure related to the additional transactions created by the pooling arrangements. OSFI proposes the following modified approach to calculating the operational risk margin for insurers that are part of intra-group pooling arrangements:

- the greater of:
 - 3% charge on direct written premiums, and
 - 2% charge on premiums assumed;

plus

- 3% charge on premiums ceded

Only reinsurance pooling arrangements between associated Canadian federally or provincially regulated companies would qualify for this modified approach and a prior approval from OSFI would be required in order to be allowed to apply the proposed approach.

- ***Risk charge on year-over-year premium growth beyond the 20% threshold***

Rapid growth is linked to acquisitions, new lines of business or changes to existing products or underwriting criteria – all of which can create additional pressures on people and systems. Companies with premium growth beyond a threshold have additional operational risk and should therefore attract a higher risk charge.

OSFI believes that a threshold of 20% for growth in premiums is a reasonable measure. The premium growth charge is calculated using gross premiums, i.e. direct premiums written plus premiums assumed in the past 12 months. A 3% risk factor would be applied to the total amount of premiums written and assumed in the current year above the 20% growth threshold compared to the premiums written and assumed in the previous year.

- For example, assume that as a result of rapid growth, policy premiums increase by 50% from \$100 to \$150. The amount above the 20% increase (\$30) is subject to an additional risk charge of 3%.

In case of an acquisition, the total direct written premiums for a prior reporting period (before the acquisition) should be a sum of the gross premiums written by the two separate entities, i.e. a sum of the acquiring and the acquired company's gross written premiums.

- For example, assume that in 2011 company A with gross written premiums of \$100 for the 12 months period ending December 31, 2010 acquired company B with gross written premiums of \$50 for the same period. The merged company reported a total of \$225 in gross written premiums for the 12 months period ending December 31, 2011. The operational risk charge associated with rapid growth in premiums would be calculated as: $3\% \times [225 - (100 + 50) \times 1.2]$ or $3\% \times \$45 = \1.35

- ***40% cap on operational risk charge***

The 40% cap serves to dampen the operational risk charge for companies that have high-volume/low-complexity business with high levels of reinsurance. The 40% cap would be calculated in relation to capital/margin required calculated at target, before operational risk margin and diversification credit.

Chapter 10. Risk Aggregation and Diversification

For the purposes of this discussion paper, OSFI defines risk aggregation as the approach used to calculate the total of all individual risk elements. A diversification credit results when the method of aggregation of risks produces results that are less than the sum of the total of the

individual risk elements. Under the revised capital framework, OSFI is prepared to allow some diversification credit in the determination of P&C capital/margin requirements.

In order to determine the level of the diversification credit, OSFI has analysed various categories of diversification and their applicability to the Canadian P&C insurance sector. Based on its analysis, OSFI has identified two suitable risk categories: 1) diversification within a risk category but across different lines of business, and 2) diversification across different risk categories. OSFI considers allowing a diversification credit within insurance risk and a diversification credit between insurance risk and a sum of credit and market risks.

1) Diversification within insurance risk

OSFI believes it is prudent to allow some diversification credit within insurance risk under the assumption that the insurer has a well-diversified portfolio of risks for a given portfolio of businesses. Diversification within insurance risk has been considered as part of the review of claims and premiums liabilities risk margins as explained above in chapter 4: *Policy Liability Risks* and an implicit diversification credit has been included in the proposed risk factors for unpaid claims and premium liabilities.

2) Diversification between insurance risk and the sum of credit and market risks

Diversification may exist between different risk categories, for example, insurance risk and market risk, where claims results are uncorrelated with investment market returns. Recent events demonstrated that market and credit risks, together defined as asset risks, are highly correlated and therefore no diversification is warranted between market and credit risks. OSFI is, however, contemplating allowing some diversification credit between insurance and asset risk categories.

Given that it is only considering two risk categories, OSFI proposes a diversification credit based on a square root formula using a very simple correlation matrix with two categories: asset risks and insurance risk.

$$\text{Diversification credit} = (A + I) - \sqrt{(A^2 + I^2 + 2 \times R \times A \times I)},$$

where:

A is the asset risks margin (i.e. capital/margin required for credit risk and market risk; the latter is the sum of capital required for interest rate risk, foreign exchange risk, equity risk and real estate risk)

I is the insurance risk margin (i.e. capital/margin required for insurance risk)

R is the correlation factor between A and I

Based on OSFI's analysis, a correlation factor of 50%, which corresponds to a medium level correlation, was deemed appropriate to determine the diversification credit for Canadian P&C insurers.

E. NEXT STEPS

This discussion paper outlines OSFI's views on, and proposed changes to, the revised capital framework for Canadian P&C insurers. It serves to continue the discussion with the industry and other key stakeholders on the considerations and proposed approaches contained therein.

Comments on the discussion paper and the QIS results will be taken into consideration in OSFI's analysis and in the preparation of the 2015 draft MCT Guideline. OSFI expects to publish a draft MCT Guideline and draft annual return exhibits before the end of 2013 for industry consultation. Subsequently, the final MCT Guideline will be issued in the summer of 2014, leaving sufficient lead time prior to the January 1, 2015 projected implementation date.

OSFI looks forward to receiving comments from interested stakeholders on the proposed changes to the revised regulatory capital framework described in this discussion paper, together with companies' QIS results. Written comments and QIS responses should be provided to OSFI by July 31, 2013, either by electronic mail at judith.roberge@osfi-bsif.gc.ca, or by post mail at:

Ms. Judith Roberge
Director, Property and Casualty Insurance, Capital Division
Office of the Superintendent of Financial Institutions
255 Albert Street, 15th Floor
Ottawa, Ontario, K1A 0H2

Appendix A

OSFI's Public Consultation on Definition of Capital for P&C Insurance

Summary of Industry's Comments on OSFI's Position Paper <i>Proposed Changes to the Definition of Capital under the Minimum Capital Test: Qualifying Criteria, Capital Components and Regulatory Adjustments</i> issued on July 4, 2012	
Comments	Responses
General Remarks	
Agree the available capital under the MCT framework should include only high quality of capital that is sufficient to absorb losses in periods of stress and supportive of OSFI's proposed changes.	Noted
Support the change in calculating capital available by starting from total equity under IFRS and then deducting non-admissible items as it will allow stakeholders to better understand the relationship between equity, as presented on the IFRS financial statements, and the regulatory capital.	Noted
Proposed Capital Limits and Volatility of Capital Available	
<p>The capital available measure is very volatile due to fluctuations in Accumulated Other Comprehensive Income (AOCI) values. By using this measure, OSFI is giving recognition in capital available to unrealized gains and losses that are temporary in nature and are subject to changes in accounting rules. This will weaken the effectiveness of the proposed 7% and 40% capital limits and will introduce unnecessary volatility.</p> <p>We believe that smoothing techniques should be used when calculating capital limits. Alternatively, only permanent capital consisting of common and preferred shares should be used as the basis for limit calculations. This will mitigate the effects of</p>	OSFI agrees with the fact that the proposed calculation of capital limits with total capital available, including AOCI in the denominator will create added volatility associated with fluctuations in financial markets. OSFI therefore proposes to modify the calculation of the limits such that the limits for instruments under schedule B or C are measured against capital available less AOCI.

Summary of Industry's Comments on OSFI's Position Paper
Proposed Changes to the Definition of Capital under the Minimum Capital Test: Qualifying Criteria, Capital Components and Regulatory Adjustments
issued on July 4, 2012

Comments	Responses
temporary fluctuations in AOCI and effects of future accounting changes.	
Qualifying Criteria	
Supportive of OSFI offering a clearer definition of what characteristics are expected for capital instruments included in capital available. At the same time, concerned that by restricting the characteristics of instruments that qualify for inclusion in capital available, OSFI may hamper insurers' ability to raise capital as less favourable terms may have to be offered to investors. This may also increase the costs to insurers as higher yield may need to be offered to investors to remain competitive with issuers in other industries.	The proposed qualifying criteria are consistent across financial services sector so no competitiveness issues should arise. The qualifying criteria are necessary to ensure that instruments of highest quality comprise available capital of Canadian financial institutions. The proposed criteria are also consistent with the current MCT requirements.
Computer Software	
Please clarify whether the proposed treatment of computer software intangibles (i.e. 100% deduction from capital available) is in addition to the current 35% capital factor or a replacement of the current treatment.	The proposed 100% deduction of computer software intangibles from capital available is a replacement of the current 35% capital charge.
OSFI should reconsider its position with respect to capital treatment of computer software. The proposed change may discourage the industry in general from maintaining and upgrading systems at the time when such investment is required to ensure efficient and effective operations.	OSFI does not intend to change its proposed capital treatment of computer software. OSFI regulates the P&C industry under the going concern assumption with capital available primarily comprised of highest quality instruments (instruments meeting the criteria under schedules A and B) sufficient to absorb losses in periods of stress. Computer software does not fit into the going concern assumption since the realizable value of computer software in case of an insurer's insolvency is highly uncertain.

Appendix B

Proposed MCT Qualifying Criteria for Capital Instruments

Schedule A:

MCT Criteria for Classification as Common Shares for Regulatory Capital Purposes²

1. Represents the most subordinated claim in liquidation of the insurer.
2. The investor is entitled to a claim on the residual assets that is proportional with its share of issued capital, after all senior claims have been paid in liquidation (i.e. has an unlimited and variable claim, not a fixed or capped claim).
3. The principal is perpetual and never repaid outside of liquidation (setting aside discretionary repurchases or other means of effectively reducing capital in a discretionary manner that is allowable under relevant law and subject to the prior approval of the Superintendent).
4. The insurer does not, in the sale or marketing of the instrument, create an expectation at issuance that the instrument will be bought back, redeemed or cancelled, nor do the statutory or contractual terms provide any feature that might give rise to such expectation.
5. Distributions are paid out of distributable items (retained earnings included). The level of distributions is not in any way tied or linked to the amount paid in at issuance and is not subject to a contractual cap (except to the extent that an insurer is unable to pay distributions that exceed the level of distributable items or to the extent that distribution on senior ranking capital must be paid first).
6. There are no circumstances under which the distributions are obligatory. Non-payment is, therefore, not an event of default.
7. Distributions are paid only after all legal and contractual obligations have been met and payments on more senior capital instruments have been made. This means that there are no preferential distributions, including in respect of other elements classified as the highest quality issued capital.
8. It is in the form of issued capital that takes the first and proportionately greatest share of any losses as they occur. Within the highest quality capital, each instrument absorbs losses on a going concern basis proportionately and *pari passu* with all the others.
9. The paid-in amount is recognized as equity capital (i.e. not recognized as a liability) for determining balance sheet solvency.

² The criteria also apply to non-joint stock companies, such as mutuals, taking into account their specific constitution and legal structure. The application of the criteria should preserve the quality of the instruments by requiring that they are deemed fully equivalent to common shares in terms of their capital quality as regards loss absorption and do not possess features that could cause the condition of the insurer to be weakened as a going concern during periods of market stress.

10. It is directly issued and paid-in³ and the insurer cannot directly or indirectly have funded the purchase of the instrument. Where the consideration for the shares is other than cash, the issuance of the common shares is subject to the prior approval of the Superintendent.
11. The paid in amount is neither secured nor covered by a guarantee of the issuer or related entity⁴ or subject to any other arrangement that legally or economically enhances the seniority of the claim.
12. It is only issued with the approval of the owners of the issuing insurer, either given directly by the owners or, if permitted by applicable law, given by the Board of Directors or by other persons duly authorized by the owners.
13. It is clearly and separately disclosed on the insurer's balance sheet, prepared in accordance with the relevant accounting standards.

**MCT Criteria for Classification as Non-Common Shares for Regulatory Capital Purposes,⁵
Subject to 40% of Capital Available**

Schedule B:

Capital instruments subject to a 40% limit of capital available

1. Issued and paid-in in cash or, subject to the prior approval of the Superintendent, in property.
2. Subordinated to policyholders, general creditors and subordinated debt holders of the insurer.
3. Is neither secured nor covered by a guarantee of the issuer or related entity or other arrangement that legally or economically enhances the seniority of the claim vis-à-vis policyholders and creditors.⁶
4. Is perpetual, i.e. there is no maturity date and there are no step-ups⁷ or other incentives to redeem⁸

³ Paid-in capital generally refers to capital that has been received with finality by the institution, is reliably valued, fully under the institution's control and does not directly or indirectly expose the institution to the credit risk of the investor.

⁴ A related entity can include a parent company, a sister company, a subsidiary or any other affiliate. A holding company is a related entity irrespective of whether it forms part of the consolidated insurance group.

⁵ NVCC criteria and other related considerations are not addressed here and will be discussed separately.

⁶ Further, where an institution uses an SPV to issue capital to investors and provides support, including overcollateralization, to the vehicle, such support would constitute enhancement in breach of criterion #3 above.

⁷ A step-up is defined as a call option combined with a pre-set increase in the initial credit spread of the instrument at a future date over the initial dividend (or distribution) rate after taking into account any swap spread between the original reference index and the new reference index. Conversion from a fixed rate to a floating rate (or vice versa) in combination with a call option without any increase in credit spread would not constitute a step-up.

5. May be callable at the initiative of the issuer only after a minimum of five years:
 - a. To exercise a call option, an insurer must receive prior approval of the Superintendent; and
 - b. An insurer's actions and the terms of the instrument must not create an expectation that the call will be exercised; and
 - c. An insurer must not exercise a call unless:
 - i. It replaces the called instrument with capital of the same or better quality, including through an increase in retained earnings, and the replacement of this capital is done at conditions that are sustainable for the income capacity of the insurer⁹; or
 - ii. The insurer demonstrates that its capital position is well above the supervisory target capital requirements after the call option is exercised.
6. Any repayment of principal (e.g. through repurchase or redemption) must require Superintendent approval and insurers should not assume or create market expectations that such approval will be given.
7. Dividend/coupon discretion:
 - a. the insurer must have full discretion at all times to cancel distributions/payments;¹⁰
 - b. cancellation of discretionary payments must not be an event of default or credit event;
 - c. insurers must have full access to cancelled payments to meet obligations as they fall due;
 - d. cancellation of distributions/payments must not impose restrictions on the insurer except in relation to distributions to common shareholders.
8. Dividends/coupons must be paid out of distributable items.
9. The instrument cannot have a credit sensitive dividend feature, that is a dividend/coupon that is reset periodically based in whole or in part on the insurance organization's credit standing.¹¹

⁸ Other incentives to redeem include a call option combined with a requirement or an investor option to convert the instrument into common shares if the call is not exercised.

⁹ Replacement issuances can be concurrent with but not after the instrument is called.

¹⁰ A consequence of full discretion at all times to cancel distributions/payments is that "dividend pushers" are prohibited. An instrument with a dividend pusher obliges the issuing insurer to make a dividend/coupon payment on the instrument if it has made a payment on another (typically more junior) capital instrument or share. This obligation is inconsistent with the requirement for full discretion at all times. Furthermore, the term "cancel distributions/payments" means to forever extinguish these payments. It does not permit features that require the insurer to make distributions/payments in kind at any time.

¹¹ Institutions may use a broad index as a reference rate in which the issuing institution is a reference entity; however, the reference rate should not exhibit significant correlation with the institution's credit standing. If an institution plans to issue capital instruments where the margin is linked to a broad index in which the institution is a reference entity, the institution should ensure that the dividend/coupon is not credit-sensitive.

10. The instrument cannot contribute to liabilities exceeding assets if such a balance sheet test forms part of national insolvency law.
11. Unless the insurer has obtained the prior approval of the Superintendent, the instrument must be classified as equity for accounting purposes.¹²
12. Neither the insurer nor a related party over which the insurer exercises control or significant influence can have purchased the instrument, nor can the insurer directly or indirectly have funded the purchase of the instrument.
13. The instruments cannot have any features that hinder recapitalization, such as provisions that require the issuer to compensate investors if a new instrument is issued at a lower price during a specified time frame.
14. If the instrument is not issued directly by the insurer (e.g. it is issued out of a special purpose vehicle – “SPV”), proceeds must be immediately available without limitation to an insurer in a form that meets or exceeds all of the other criteria for inclusion in capital available as specified in this Schedule B. For greater certainty, the only assets the SPV may hold are intercompany instruments issued by the institution or a related entity with terms and conditions that meet or exceed criteria specified in Schedule B. Put differently, instruments issued to the SPV have to fully meet or exceed all of the eligibility criteria under Schedule B as if the SPV itself was an end investor – i.e. the insurer cannot issue a lower quality capital or senior debt instrument to an SPV and have the SPV issue higher quality capital instruments to third-party investors so as to receive recognition as qualifying capital under Schedule B.

Schedule C:

Capital instruments subject to a 7% limit of capital available (within the 40% limit)

1. Issued and paid-in in cash or, with the prior approval of the Superintendent, in property.
2. Subordinated to policyholders and general creditors of the insurer.
3. Is neither secured nor covered by a guarantee of the issuer or related entity or other arrangement that legally or economically enhances the seniority of the claim vis-à-vis insurer’s policyholders and/or general creditors.
4. Maturity:
 - a. minimum original maturity of at least five years;
 - b. recognition in regulatory capital in the remaining five years before maturity will be amortized on a straight line basis;
 - c. there are no step-ups¹³ or other incentives to redeem.

¹² Such approval would only be granted where the insurer can demonstrate that the instrument otherwise meets the qualifying criteria provided for under Schedule B.

5. May be callable at the initiative of the issuer only after a minimum of five years:
 - a. To exercise a call option an insurer must receive the prior approval of the Superintendent; and
 - b. An insurer must not do anything that creates an expectation that the call will be exercised;¹⁴ and
 - c. An insurer must not exercise a call unless:
 - i. It replaces the called instrument with capital of the same or better quality, including through an increase in retained earnings, and the replacement of this capital is done at conditions that are sustainable for the income capacity of the insurer;¹⁵ or
 - ii. The insurer demonstrates that its capital position is well above the supervisory target capital requirements after the call option is exercised.
6. The investor must have no rights to accelerate the repayment of future scheduled payments (interest or principal), except in bankruptcy, insolvency, wind-up, or liquidation.
7. The instrument cannot have a credit sensitive dividend feature, i.e. a dividend/coupon that is reset periodically based in whole or in part on the insurer's credit standing.
8. Neither the insurer nor a related party over which the insurer exercises control or significant influence can have purchased the instrument, nor can the insurer directly or indirectly have funded the purchase of the instrument.
9. If the instrument is not issued directly by the insurer (e.g. it is issued out of a special purpose vehicle – "SPV"), proceeds must be immediately available without limitation to the insurer in a form that meets or exceeds all of the criteria for inclusion specified in this Schedule C. For greater certainty, the only assets the SPV may hold are intercompany instruments issued by the institution or a related entity with terms and conditions that meet or exceed the above Schedule C criteria. Put differently, instruments issued to the SPV have to fully meet or exceed all of the eligibility criteria under Schedule C as if the SPV itself was an end investor – i.e. the institution cannot issue a lower capital or a senior debt instrument to an SPV and have the SPV issue higher quality capital instruments to third-party investors so as to receive recognition as qualifying capital under Schedule C.

¹³ A step-up is defined as a call option combined with a pre-set increase in the initial credit spread of the instrument at a future date over the initial dividend (or distribution) rate after taking into account any swap spread between the original reference index and the new reference index. Conversion from a fixed rate to a floating rate (or vice versa) in combination with a call option without any increase in credit spread would not constitute a step-up.

¹⁴ An option to call the instrument after five years but prior to the start of the amortisation period will not be viewed as an incentive to redeem as long as the insurer does not do anything that creates an expectation that the call will be exercised at this point.

¹⁵ Replacement issuances can be concurrent with but not after the instrument is called.