Insurance Corporation of British Columbia

Financial Allocation Methodology Examination

August 25, 2003
## Contents

1 Introduction ......................................................................................................................... 1
   1.1 ICBC Operations .............................................................................................................. 1
   1.2 Core Services Review ................................................................................................. 1
   1.3 Regulatory Environment ............................................................................................. 2
   1.4 Purpose and Scope of Examination ............................................................................ 2

2 Evaluative Criteria .............................................................................................................. 3

3 ICBC Allocation Methodology ............................................................................................ 5
   3.1 Allocation Approaches ............................................................................................... 5
   3.2 Development Process ................................................................................................ 6

Conclusion .............................................................................................................................. 8

Appendices

Appendix 1 – Audit Opinion

Appendix 2 – Analysis of Revenue and Cost Allocation Methodology

---

**Important**

We understand that this report will be provided to the British Columbia Provincial Government and the British Columbia Utilities Commission. However, it should not be used for any other purpose and we deny responsibility to any other party that may obtain and use this report.
1 Introduction

1.1 ICBC Operations

The Insurance Corporation of British Columbia (ICBC or the Corporation) is a provincial crown corporation that provides auto insurance to all British Columbians. Founded in 1973, the Corporation is one of Canada’s largest insurance companies, writing in excess of $2.6 billion of annual premiums for more than 2.7 million customers. Every automobile owner in BC is required to purchase a package of basic auto insurance and then has the choice of purchasing further optional insurance coverages. The Corporation is the only provider of basic auto insurance in BC, however, it competes with other insurers for optional insurance coverages.

In addition to its role as an insurance provider, the Corporation administers vehicle licensing and registration services, driver-licensing services, road safety and loss management services and collects fines in respect of the driving and traffic violations. All receipts from the collection of licences and fines are remitted in full to the provincial government.

1.2 Core Services Review

In the spring of 2001, the BC government initiated a “Core Services Review” of all Crown Corporations. The objective of the review was to assess whether ICBC was operating in the public interest, was effective and efficient, was being accountable and whether the services provided were affordable. In November 2002, the government completed its review and concluded that:

a. The commercial vehicle compliance function should be transferred back to the provincial government;

b. The Corporation should be placed under the authority of an independent regulator, the British Columbia Utilities Commission (BCUC);

c. No further changes were required to ICBC’s operating structure and activities at that time, and that the Corporation be required to demonstrate its ability to meet the objectives set out by the Core Services Review.
Insurance Corporation of British Columbia

Financial Allocation Methodology Examination

1.3 Regulatory Environment

In establishing the regulatory framework for ICBC, a number of changes are being implemented. The Corporation was placed under the authority of the BCUC which will be responsible for reviewing and approving rates for basic insurance, ensuring that the basic insurance business does not subsidize the optional insurance business and that the Corporation does not impede competition in the optional auto insurance market. This is intended to result in greater accountability and increased transparency in the rate setting process for the basic insurance business.

1.4 Purpose and Scope of Examination

Under the proposed regulatory framework, ICBC will be providing its first rate submission to the regulator in 2003 for the approval of 2004 basic insurance rates. In order to prepare the submission, the revenues and costs associated with providing basic insurance and non-insurance services need to be determined. It is also anticipated that for the years ended December 31, 2003 and 2004, the Corporation will prepare consolidated financial statements which include separate schedules showing the statement of operations for the basic and non-insurance business, and for the optional business. This is a requirement of the newly enacted Insurance Corporation Amendment Act. Throughout this report the term “basic business” is defined as including both the basic insurance and non-insurance businesses.

For the year ended December 31, 2002, the Corporation’s total revenues amounted to $2.6 billion, investment income was $0.3 billion, and total claims and operating costs were $2.9 billion. The Corporation has undertaken an analysis of these revenues and costs, and developed a methodology for allocating these to each business. We understand that the allocation methodology will be reviewed annually, updated as required, and used in the preparation of consolidated financial statements and schedules and for rate submissions.

The Corporation has engaged PricewaterhouseCoopers (PwC) to examine the bases of allocation of revenues and costs between the basic and optional businesses for the year ended December 31, 2002. We understand that these bases will be applied to the financial results in future years for the purpose of establishing rates.
We performed our examination in accordance with assurance standards established by the Canadian Institute of Chartered Accountants. These standards require any assurance examination to evaluate the subject matter (management’s assertion on the bases of allocation) against established criteria. The criteria established for our examination are set out in Section 2. We planned and performed the audit to obtain a reasonable basis for expressing an opinion on whether management’s assertion as to the consistency of the bases of allocation is fairly stated, in all material respects, with the criteria. Accordingly, we do not express an opinion on the application of these bases of allocation and the results derived from the application of these bases to the December 31, 2002 audited statement of operations.

2 Evaluative Criteria

In order for the Corporation to fulfil its legislative obligations under the newly enacted Insurance Corporation Amendment Act, premiums for basic and optional insurance coverages must be established at rates which ensure, so far as is practicable, that there is no cross-subsidization between the basic and optional lines of business. In order to achieve this objective, the Corporation must determine appropriate bases by which to allocate certain revenues and costs that are not directly attributable to basic or optional insurance coverage.

An allocation methodology should be designed to reflect key allocation principles, and to address issues arising from both the internal and external environments. There are a number of alternative acceptable principles to allocate revenues and costs between the basic and optional businesses.

In selecting a basis of allocation, the key principle used by the Corporation was cost causation where the revenues and costs associated with an activity are linked to the business causing the activity to take place. The Corporation has developed criteria to assess the appropriateness of its revenue and cost allocation methodology. These have been developed by reviewing industry practices and other public insurance entities in Canada such as the Manitoba Public Insurance Corporation, reviewing allocation guidelines provided by Property and Casualty regulators and standard setters in the US and Canada, and considering how these apply to the Corporation.
The criteria established by the Corporation for determining an appropriate basis of allocation were as follows:

1. The bases of allocation should be consistent with generally accepted accounting principles and the four principal qualitative characteristics of information identified by the Canadian Institute of Chartered Accountants, i.e., understandability, relevance, reliability and comparability. In addition, these bases should be determined using the most current data available.

2. The bases of allocation should be consistent with the National (US) Association of Insurance Commissioners (NAIC) – Statutory Issue Paper No. 94 – Allocation of Expenses – which outlines that there must be uniformity in the classification, allocation and reporting of costs and consistency in the development and application of accounting principles. The NAIC Statutory Issue Paper No. 94 also requires that allocations should be based on a method that yields the most accurate results. Specific identification of a cost with an activity that is represented by one of the categories will generally be the most accurate method. Where specific identification is not feasible, allocation of costs should be based on pertinent factors or ratios.

3. The bases of allocation should be consistent with the guidelines laid out by the Insurance Bureau of Canada Expense Allocation Program, which require a logical allocation of revenues and costs to a particular product line.

4. The bases of allocation should be consistent, where appropriate, with the bases of allocation used within the public automobile insurance industry in Canada.

We are satisfied that the above criteria are suitable for the evaluation of the bases of allocation.
3 ICBC Allocation Methodology

3.1 Allocation Approaches

We understand that management considered two fundamental approaches to allocating revenues and costs:

a) Incremental

Under an incremental approach, the basic business would absorb the majority of the Corporation’s costs on the premise that these costs would be incurred irrespective of the optional business. Only those incremental costs that relate specifically to the provision of optional insurance would be allocated to the optional business. This approach would require fewer assumptions to be made since costs required for the basic business, such as infrastructure costs, would be all allocated to the basic business. This approach does not reflect the current economic reality of the Corporation’s activities as the optional business does benefit from the underlying infrastructure already in place, including efficiencies of scale that would not be available in stand-alone operations. This approach would be viewed as subsidization of the optional business by the basic business as it would not reflect the full costs of operating the optional business.

b) Pro-rata

This approach allocates revenues and costs to each line of business based on the drivers of those revenues and costs, and the degree of causality. This approach is consistent with the intention of ensuring, so far as practicable, that there is no cross-subsidization between the basic and optional businesses since each business shares in the costs of the Corporation. For revenues and costs that cannot be attributed directly to either line of business, a basis of allocation needs to be determined. Management considered this approach to be more objective and reasonable over an incremental approach and has adopted this approach in determining an appropriate basis of allocation.
Implementing an allocation methodology is a challenge and the following factors should be considered in developing and implementing the process:

- **Keep it simple:** People throughout the organization need to understand the bases of allocation.
- **Keep it automated:** Where possible, information systems should allocate revenues and costs at the inception of each transaction.
- **Review and update regularly:** All bases for allocations should be reviewed and updated on a regular basis, or as circumstances change.

While considerable effort can be expended in determining the most appropriate bases for allocating revenues and costs, an allocation process does require management judgement in determining which allocation method to apply and in the application of the allocation method selected.

The results of the allocation process should not be interpreted to represent the results of two separate stand-alone insurance operations due to a number of reasons as follows:

- Separate companies would be likely to require different capital levels than ICBC's present capital level.
- Investment policies and strategies may vary due to differences in the claims liabilities and the risk/return objectives of each business.
- With two separate stand-alone operations, total expenses could be likely higher due to duplicated costs within each operation and fewer economies of scale.
- Return on capital requirements and risk margins will vary as a result of differences in products offered, underwriting practices and risk/return expectations of stakeholders.

### 3.2 Development Process

In the development of the allocation methodology, ICBC performed a detailed review of its revenues and costs (at the cost centre level) to understand the underlying revenue or cost drivers in order to determine the most appropriate bases of allocation. The disaggregation of its business in this manner is a new requirement for ICBC.
In determining the most appropriate bases on which to allocate revenues and costs, the Corporation adopted the following process. Revenues and costs that are tracked separately and clearly identifiable to a line of business were assigned directly to that line of business. The balance of revenues and costs were allocated using one of the methods below, as determined to be most appropriate by management:

1. Premium income – Where work done in a functional area is aligned with premium income, or some other form of revenue, the allocation was based on split of revenues.

2. Claims incurred – Where work done in a functional area is aligned with claims incurred, the allocation was based on the actuarially determined split of claims.

3. Work effort – Where volume of work completed by a functional area can be measured by specific transactions and the information already exists, the transactions were allocated to the relevant business. The allocation was determined using transactional costing analysis, operational management reports, management interviews and analysis of work efforts.

4. Shared services – Where a functional area is a support group and services all areas, the allocation was based on the overall basic/optional relative ratios of the operating areas of the business – insurance, loss management and road safety and claims operations.

In determining the allocation basis, the Corporation relied on its existing information technology systems. ICBC operates its two lines of business as one integrated company and the Corporation’s information systems have not been designed to track all revenues and costs separately. As a result, management judgement was required in determining which allocation method to apply and in the application of the allocation method selected. Throughout this process, there was also a need to balance the level of effort, time and cost required to undertake further analysis against the expected improvement in the level of precision achieved.

We understand that a review of the bases of allocation will be integrated with the Corporation’s annual planning process, whereby the bases will be confirmed or revised as appropriate, and the underlying data required for the application of the bases will be updated. As part of this process, the Corporation will consider the cost/benefit of investing in enhancements to information systems to facilitate the automation of the allocation process in specific areas, and consider implementing certain recommendations identified during our audit.
We are satisfied that management has undertaken the development and application of the allocation methodology with objectivity and due care. Where the Corporation could have used a number of alternative acceptable methods, these were discussed and a number of refinements to the allocation methodology were made during the course of this audit.

4 Conclusion

We have issued an unqualified opinion on management's assertion that the bases of allocating revenues and costs between the basic and optional businesses for the year ended December 31, 2002 are consistent, in all material respects, with the evaluative criteria outlined in Section 2. This opinion is included in Appendix 1. We have included in Appendix 2 our commentary on key allocations together with recommendations to improve the efficiency of the allocation methodology.

Our audit opinion is in respect of the bases of allocation. We do not express an opinion on the application of these bases to the revenues and costs for the year ended December 31, 2002.

We understand that these bases of allocation will be applied to revenues and costs for the 2004 rate setting process. In determining whether the same bases of allocation are appropriate to use for future periods of time, consideration would have to be given to evaluating the impact of any changes in the Corporation's business environment and operating activities.

We would like to thank the Corporation staff for their assistance on this engagement.
Insurance Corporation of British Columbia

Financial Allocation Methodology Examination

Appendix 1

Audit Opinion
August 25, 2003

Auditors' Report

To the Directors of
Insurance Corporation of British Columbia

We have audited management's assertion, included in the accompanying Financial Allocation Methodology Report, that the Insurance Corporation of British Columbia’s bases of allocation of its revenues and costs between the basic and optional businesses for the year ended December 31, 2002 are consistent with the criteria set out in Section 2 of our Financial Allocation Methodology Examination Report, dated August 25, 2003. Management is responsible for the appropriateness of the bases of allocation of revenues and costs between the basic and optional businesses. Our responsibility is to express an opinion on management's assertion based on our audit.

We conducted our audit in accordance with generally accepted auditing standards. Those standards require that we plan and perform an audit to obtain reasonable assurance that management's assertion is free from significant misstatement. An audit includes examining, on a test basis, evidence supporting management's assertion. An audit also includes assessing the bases used and the significant judgments made by management.

In our opinion, management’s assertion presents fairly, in all material respects, the consistency of the bases of allocation of the Corporation’s revenues and costs between the basic and optional businesses for the year ended December 31, 2002 with the criteria.

This report is intended for the information and use of the board of directors of the Corporation for discussion with the British Columbia Provincial Government and the British Columbia Utilities Commission and should not be used for any other purpose. Any use that another third party makes of this report, or any reliance or decisions made based on it, are the responsibility of such third parties. We accept no responsibility for loss or damages, if any, suffered by any third party as a result of decisions made or actions taken based on this report.

PricewaterhouseCoopers LLP
Chartered Accountants

PricewaterhouseCoopers LLP refers to the Canadian firm of PricewaterhouseCoopers LLP and the other member firms of PricewaterhouseCoopers International Limited, each of which is a separate and independent legal entity.
Appendix 2

Analysis of Revenue and Cost Allocation Methodology

We have outlined below a summary of our findings with respect to our examination of the bases of allocation for each line on the Corporation’s audited statement of operations. All references to amounts are December 31, 2002 audited financial results.

Total premium revenues amounted to $2.6 billion, investment income was $0.3 billion, and total claims and operating costs were $2.9 billion. Of these amounts, vehicle premiums earned and claims incurred represented the most significant items, $2.6 billion and $2.2 billion respectively.

Vehicle premium revenues ($2,607 million)

Basic and optional coverage premiums, which amount to 97% of vehicle premium revenues, are captured in the Corporation’s information systems at the time of writing insurance policies; accordingly there is no allocation required.

Other vehicle premium revenues of $73 million, relating to the following items, required allocation, as the information systems do not currently capture the information from a basic or optional business perspective:

- Special coverages
- Fleet reporting
- Merchant fees
- Reinsurance expense
- Short term surcharge
- Cancellation fees/retained premiums/unprocessed transactions

The Corporation has allocated the above items by analyzing the nature of each type of revenue and making an assessment as to the basic or optional nature of these revenues.
Insurance Corporation of British Columbia

Financial Allocation Methodology Examination

Driver Premiums ($22 million)

Driver premiums (i.e. penalties for cumulative driving violations) have been allocated 100% to the basic business. These premiums (or equivalent) are attributed to the basic business by definition through section 2(5) of the Special Direction IC1 to the BCUC.

Claims incurred ($2,193 million)

Many coverages have been allocated entirely to either basic or optional in view of the nature of the coverage (e.g. death benefits and accident benefits are 100% basic, whereas collision and windshield coverages are 100% optional). Coverages which are not 100% attributable to either basic or optional were a portion of 3rd party liability bodily injury, property damage and special coverages. For those components of claims incurred that required allocation, management used the following bases of allocation:

1. Reserves for Incurred But Not Reported (IBNR) claims were calculated by multiplying an estimate of the number of unreported claims by the average estimated cost per IBNR claim, by accident year. This reserve was then allocated based on the distribution of earned premium.
2. Reserves for known claims were calculated as the difference between total reserves and reserves for IBNR claims, by accident year. This was added to payments (net of recoveries), and the resulting amount was allocated based on actual amounts by claim.
3. Allocated Loss Adjustment Expenses (ALAE) payments and reserves were allocated proportionately to the allocation in 2 above.
4. Margin for adverse development was allocated based on the distribution of unpaid losses.
5. Unallocated Loss Adjustment Expenses (ULAE) reserves were allocated based on the distribution of unpaid claims between basic and optional.

The allocation methodology used by the Corporation was based on a number of assumptions which are summarized below:

1. All open claims will develop at the same average rate.
2. IBNR claims are incurred proportionately to premium.
3. Allocated Loss Adjustment Expenses are incurred proportionately to incurred losses.
4. ULAE costs are incurred proportionately to the amount of reserve for individual claims.
Insurance Corporation of British Columbia

Financial Allocation Methodology Examination

We are satisfied that actuarial management has undertaken the allocation process with appropriate objectivity and due care. We have recommended, and management have agreed, that the reasonableness of the accident year results should be tested regularly to ensure that there is no bias in the allocation, especially for most recent accident years.

We understand that as ICBC moves forward and upgrades its information systems and processes, consideration will be given to tracking claims costs separately for each business with the intent of minimizing the need for allocation. Management has advised that the changes required to information systems would be complex, costly and have significant operational impact; accordingly, a cost/benefit and impact analysis would need to be performed prior to embarking on such changes.

Claims services costs ($230 million) and Insurance Operating costs ($110 million)

These costs are managed within three main areas at ICBC - insurance division, operations division and support divisions. The Corporation has allocated these costs by analyzing each of the cost centres (approximately 150), which capture these costs. Within the claims service costs, $137 million or 60% of these costs were based on a detailed review of transaction costs.

In the divisional analysis, there were differing levels of detail and we understand that the lack of available data may be the reason for this. We understand that the methodology will be refined over time and required data will be collected.

Insurance division – The insurance division asked departmental managers to assess and allocate each of their cost centres using the Corporation’s overall cost allocation guidance set out on page 7 of our report. For most cost centres the managers could identify cost drivers and were therefore able to allocate costs directly to the basic or optional businesses.

Operations division – The Corporation undertook a detailed, transactional costing approach in this division to allocate the cost of time spent between basic and optional businesses. This has provided the Corporation with a solid base to build on going forward. We understand that, in future years, for claims services costs, a comparison of these results to an allocation based on claims incurred will be undertaken by management, and if the results are not materially different, the Corporation may adopt the more simple and efficient basis of allocation.
Insuance Corporation of British Columbia

Financial Allocation Methodology Examination

Support divisions – In a small number of instances, corporate costs could be matched to specific cost drivers; this permitted direct allocation to either basic or optional activities for these costs. However, most corporate costs have been allocated based on a shared service method, which has been calculated as the weighted average of the basic/optional allocations for the insurance and operations divisions.

Road safety and loss management services ($38 million)

All costs relating to road safety (e.g. police road-checks, intersection cameras, road improvements etc.) have been allocated to basic coverage. The Corporation has taken the position that it would incur such costs regardless of its optional business, and does not pass on the costs of such programs to other optional coverage providers. Loss management costs, such as Special Investigation Unit operational costs, have been allocated in the same proportion as claims costs since these operations provide a pro-rata benefit to basic and optional insurance.

Premium taxes ($90 million) and Commissions ($160 million) – Insurance Operations

Premium taxes have, for the most part, been directly attributed to the basic and optional businesses as they are a direct percentage of the premium amount.

Commission expenses were directly attributed between the basic and optional businesses for each type of commission. Once this allocation was determined, 33% of the broker transaction fees were allocated to non-insurance from basic commissions on the basis of estimated work effort. We understand that management will be updating this as part of its normal annual review process to ensure the allocation methodology remains appropriate.

The allocation of deferred premium acquisition costs (commissions and premium taxes which have been deferred over the period of the premiums to which they relate) reflects a current review by the Corporation’s actuarial department as to the rate at which optional and basic claims are settled.
Insurance Corporation of British Columbia

Financial Allocation Methodology Examination

Prior years' claims adjustments ($25 million)

Prior years' claims adjustments result from the re-estimate of reserves required for claims in progress and for accidents incurred in prior years which have not yet been reported. These adjustments may vary significantly due to the time frame in which certain types of claims are settled.

The change in prior years' reserves was allocated by applying the same methodologies to allocate ultimate loss and ALAE, as well as unpaid ULAE, to data as of December 31, 2001. The difference between actuarial estimates as of December 31, 2002 and 2001 formed the basis for the allocation between basic and optional coverages.

Investment income ($327 million)

The Corporation maintains one investment portfolio to provide investment income for the business as a whole. In the insurance industry, funds for investment purposes come from unearned premiums, retained earnings and monies set aside to pay future claims. The type of investments made is in part intended to be reflective of the nature of claims liabilities for which they support. As part of the cost allocation process, management concluded that the duration of the basic reserves were not materially different to that of the optional reserves.

A weighted average of the basic/optional allocations of claims reserves, unearned premiums and retained earnings was applied to investment income to obtain an allocation of investment income. The allocations for unearned premiums and unpaid claims have been determined based on an analysis of the coverages to which they relate, and retained earnings have been allocated based on the estimated level of capital required in each business using the Office of the Superintendent of Financial Institutions' Minimum Capital Test. We understand that a direction will be issued under Section 47 of the Insurance Corporation Act relating to ICBC's capital base, at which time future allocations of retained earnings will reflect that direction.

Non-recurring items ($15 million, net)

One time non-recurring items were allocated on a case-by-case basis. Restructuring costs related to severance and the write-off of leasehold improvements. The severance costs were allocated using the support cost allocation and the write-off of leasehold improvements was allocated based on the allocation used for investment income.
Non-insurance costs ($99 million)

All non-insurance costs are included in the basic business. These costs have been directly attributed or allocated to the basic business using the methods set out in Section 3.2. Most of these costs are directly attributable as they are accounted for in separate cost centres throughout the divisions of the Corporation. In the Commission section, we noted the allocation methodology used for non-insurance commissions. The only other significant area of allocation was in administrative and other expenses.

The amount of administrative and other expenses allocated to non-insurance increased from the amount included in the December 31, 2002 Annual Report by $15 million. This reflects the more comprehensive process used by the Corporation to develop allocations for the 2004 rate setting process.